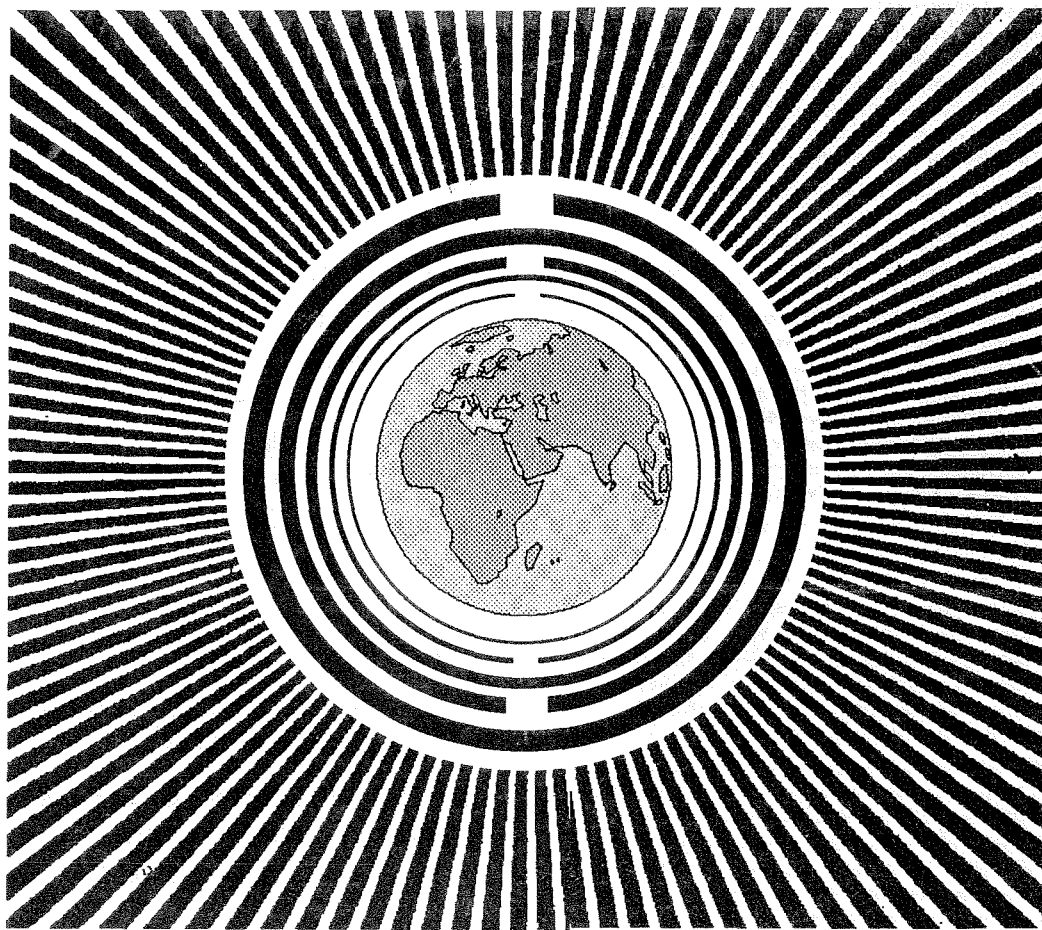


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NOTICE OF CANCELLATION

1992 BORDERLAND SCIENCES CONGRESS

A Message from BSRF Director Tom Brown

Issued April 30, 1992

It is with regret that I announce the cancellation of the **Second International Borderland Sciences Congress** in Berkeley California, scheduled to take place July 30 through August 2, 1992. The basic reason for the cancellation is the lack of funds due to the lack of sign-ups. After a six-month period since our first notice of the event and the mailing of over 15,000 announcements we have currently eight registered sign-ups, a ninth having already cancelled due to personal reasons, and five rooms reserved at the Shattuck Hotel in Berkeley. Being at the point where we need \$7,500 immediately to proceed with the function (congress site deposits, plane fares, etc.) we have no choice but to make the best overall decision and cancel the event. Because of our timing on cancelling the Berkeley Conference Center is not pressing for any penalty fees (and many thanks to them!). We are not in a position to lose any money!

Our intent in organizing this congress was to promote the concept of re-uniting Science and Art, two areas of human endeavor that have been separated through the general advance of our technological civilization. The many speakers invited are each like a facet on a jewel, each giving their perspectives, or perhaps like the proverbial six blind men with the elephant -- each seeing a different part of the structure. We still promote this path of work, it is essential that Art and Science merge if there is to be any hope for a future life-positive approach to human discovery. It is just that this congress hasn't generated the required financial momentum to be pulled off, even after working far in advance to make sure things worked right.

Many will think of this cancellation as a setback. Here at BSRF we do not view it in that manner, we consider it to be a learning experience. There has been quite a bit of interest in this congress, the speakers have been looking forward to presenting their ideas, and quite a number of

speakers beyond our original slate have been seeking to give presentations. Also, many requests have been coming in from people who want to be notified when the videotapes of the presentations will be available and if we will publish the papers. There just hasn't been the necessary interest from people willing to spend money to attend the event. So to read the writing on the wall we see that there are many independent researchers with valuable insights into the enlightened realms of science who wish to present their findings, and there are many people who want this information but cannot come up with the necessary monies for conference fees, plane fares, hotel fees, etc., but are very willing to purchase this information in a low-cost format.

We are going to move forward and work with the many researchers interacting with BSRF to promote their ideas in written and video format. Perhaps in the future we will do smaller workshops focusing on specific topics, but at this point we are not planning any public events. Our focus is to be on continuing our own personal researches which will be reported on in the **Journal of Borderland Research**, and to continue to provide a forum for independent researchers who wish to spread the information they have discovered.

Each step in life is a learning experience. We have learned from this and we apologize for any inconvenience it has caused the eight people who have signed up (who are being sent full refunds), and also to the fine researchers who have agreed to give their time to giving public presentations of their work. We look forward to working with all of you in the future.

All of us at BSRF feel that this decision is in the best interest of the foundation and its members. If anyone has any questions or comments on this decision please contact me at P.O. Box 429, Garberville CA 95440, or (707) 986-7211, Fax 986-7272.

BORDERLAND QUAKES!

by
Michael Theroux

In the short time span of roughly 15 hours, Humboldt County California experienced three major earthquakes. April 25th, 1992 at 11:06 am -- earthquake measures 6.9 on the Richter scale; April 26th, 1992 at 12:42 am -- earthquake measures 6.3 on the Richter scale; and at 4:19 am -- another earthquake measures 6.5 on the Richter scale. The epicenter of these quakes was in each case near Petrolia, California, and they were felt from just past the Oregon border all the way down to some parts of San Francisco. An estimated \$60,000,000 in damage reported, with the local towns of Petrolia, Scotia, Rio Dell, and Ferndale very heavily damaged.

I have never felt tremors that could even compare to the sheer power unleashed by these quakes. Here, in the areas surrounding Garberville, California, these quakes were strong indeed and many long time locals said they never felt anything that could even match one of these. Some people are leaving.

Well, I do not wish to downplay the devastation to the area or to our emotional well-being, but we here at Borderland are researchers and of course these incidents afforded the opportunity for analysis. The following then is an examination of experiments prior to, during and after these incredible telluric events with a complete summary of my experiences.

During the last few months I had been engaged in research pertaining directly to earth energies. These experiments were wide ranging covering many facets of the properties of the earth itself. The first of these were concerned with the possibilities of drawing potentials of energy from the earth and experiments dealing with radio wave propagation thru the natural medium (earth). While this was interesting and rewarding work, I found myself more fascinated with the idea of listening to these earth energies. My monitoring system very simply included the use of two rods placed in the ground and connected to an audio amplifier. Although I had developed a filtering arrangement, I preferred listening to all of the frequencies possible (approx. 0 to 20,000 KC). These experiments were set up to record all of the various sounds emanating from the earth itself. What I found most interesting was that the sounds I obtained were the same as those attributed to the atmosphere (called sferics). In an attempt to correlate these findings I rigged up several

types of antennas used for VLF reception and found that the signal was much stronger with the ground rods (the rods also defeated a lot of artificial electrical noise). This fact led me to the belief that these sounds actually originate in the earth. To make sure I was not misled, I used very short wires connected to copper screens buried deep in the soil completely negating any antenna effect and the results were the same (the dog decided the screens did not belong there and promptly dug them up).

One of the things I was very interested in hearing were the so called 'whistlers'. These sounds can be heard in the VLF range and are attributed to distant lightning. The idea is that lightning generated on one part of the globe transmits these whistling sounds to another part of the globe via the earth/ionosphere waveguide, with the lightning bolt itself being the transmitting antenna. After my earlier experiments with earthly electrical potentials and in radio wave propagation thru the natural medium, I was sure that I would find these sounds in the earth as well, and that they, too, were truly a product of telluric emanation. In this case the lightning would need to actually strike the earth for proper transmission to occur. It was discouraging at first for I did receive these sounds but they were very faint and for days at a time none at all would appear -- until the earthquakes.

After being thrown about by the first quake -- the 6.9, and after the initial shock had subsided, I immediately began to recount any anomalous occurrences that had taken place prior to the event. At once I remembered telling people of the incredibly loud, almost subsonic sounds which had awakened me two nights earlier. These very low tones seemed to originate from the North and came in three distinct bursts. After this happened I could not sleep the rest of the night. No one I related this to on the following day had been aware of the same sounds. I also noted the abundance of wildlife out on the roads on the evening prior to the first quake. This wasn't the usual number of deer or domestic animals normally encountered; it was the bounty of stranger creatures such as opossum and skunks that caused me to relate my observations to others. Another peculiarity was the presence of the so-called 'earthquake weather' all during the interval of earth activity. Everything became quite still and the air had thickened as if rains were forthcoming but with no attendance of

humidity. Looking about the countryside myself and others noted the presence of certain darkness issuing forth from the ground and trees, and the early evening ushered in the most foreboding blackened clouds. We knew something was still there.

Upon arriving home after a long drive up north on the day of the first quake I directly began to record the sounds of the earth. My reasons for setting up the equipment were for the possibility of recording the sounds of aftershocks related to the first quake. It wasn't long after the machine had started that I heard two very strong whistlers. These continued all night -- tape after tape of whistlers. Needless to say I was astounded and somewhat confused as well. Why were these happening in such abundance now? Could it be that the quake had actually triggered them? Now, inertialistic radio engineers will probably laugh and those crop circle enthusiasts who adhere to the whistler theory will scoff, but I would have to conclude that whistlers are a direct emanation from the earth. Could it be that the crop circles themselves are indeed a product of some subsurface energy? I think it likely.

Long about 12:00 pm on the 25th of April, the recording machine was still running and the whistlers were increasing in number. I walked out on to the deck and noted a bizarre white light on the eastern horizon much resembling the auroras of the North. I had often times noted flashes of light in the sky around this place, but this was a steady emanation and was limited to a small section of the distant horizon. This vision provoked me to note my pets' behavior as well. Although my two cats were acting a bit uneasy and restless, I noted no difference in their manner from that observed during a full moon. Neither they nor the amplified sounds gave any warning of the impending disaster.

At 12:42 am on 26 April, the Dragon wielded its power once more. The quake, measuring 6.3 on the Richter scale caused myself and my companion to flee our mountain top cabin. The cabin sits facing east and is perched atop a sizeable hill with only one side actually in contact with the ground. The remainder of the cabin is leveled off by supporting 4X4s some 10 feet off the ground. After bolting outside to escape the possibility of tobogganing down the mountain side we saw the most incredible lightshow coming from the city below. Flashes of blue lights started to appear everywhere (I was later informed that these were transformer explosions) and the sky immediately above the city became aglow with a phenomenal luminescence. Returning to the cabin after things settled, we found it to be in total disarray (all three quakes left the insides a scrambled chaos).

The recording device had been hurled to the floor, crushing a number of previously recorded tapes. With some haste, I grabbed the box and began to play back the event. The sounds that were recorded during the quake had the most impressive musical quality of which I had never heard before on any recordings of the earth. The usual static discharges became quiet and were overcome by a most incredible interplay of arrhythmic tones. The playback continued for a few seconds until it was abruptly cut off (when the device was tossed to the ground). I rewound the tape several times to see if there was any indication or warning that the quake was soon to come but nothing out of the ordinary could be discerned. This brings up an interesting conversation I had (following the quakes) with Carl Schleicher of Mankind Research. He stated that they had developed an ELF device that would warn of impending earthquakes and that they had presented their findings to the government who showed no interest. I then asked him that supposing this device really worked (my findings indicate that it doesn't) why wouldn't he offer the information to the public. He replied that the project needed the kind of funding that only the government could afford. Contradicting himself a few sentences later, he stated that they could be made up as small hand held devices and could be made available in supermarkets across the country for consumer use. I then inquired about the actual frequency range of the device and other simple layperson details. He couldn't seem to recall any information about it and quickly ended the conversation. Go figure.

On the day following the tremors I lis-

tened to the local radio stations. I was surprised to hear many reports of people seeing the strange earthquake lights. There were even two eyewitness accounts of actual lightning bolts shooting from the surface of the earth near the quakes' epicenter. An excellent source for these geophysical anomalies is *Earthquakes, Tides, Unidentified Sounds and Related Phenomena* by William R. Corliss (available from The Sourcebook Project, P. O. Box 107, Glen Arm, MD 21057, and BSRF). Everything from animal response, electrical phenomena, weather, etc. in relation to earthquakes has been compiled in this volume.

One of our interests here at Borderland is the association between nuclear tests and earthquakes and there is much information to connect the two. I checked around and found that a nuclear test was in fact scheduled for the 24th of April but that it had been postponed due to major protests. No additional information could be obtained.

By the time this goes to press there will have been thousands of aftershocks related to these quakes. As far as I am able to determine, with the careful research that I have done so far, there is virtually no way to accurately prognosticate such telluric disturbances except possibly in the few seconds prior to the event -- hardly enough forewarning. But, there is much more to be learned from these experiments than the simple prediction of earthquakes. It is, as it has always been, that the observed results in the research of telluric/aetheric phenomena must be carefully interpreted -- so that we may develop a more complete understanding of the vital energies below, above, and around us.

We just recieved word from Trevor Constable who shares with us some incredible information obtained at sea aboard the SS Maui:

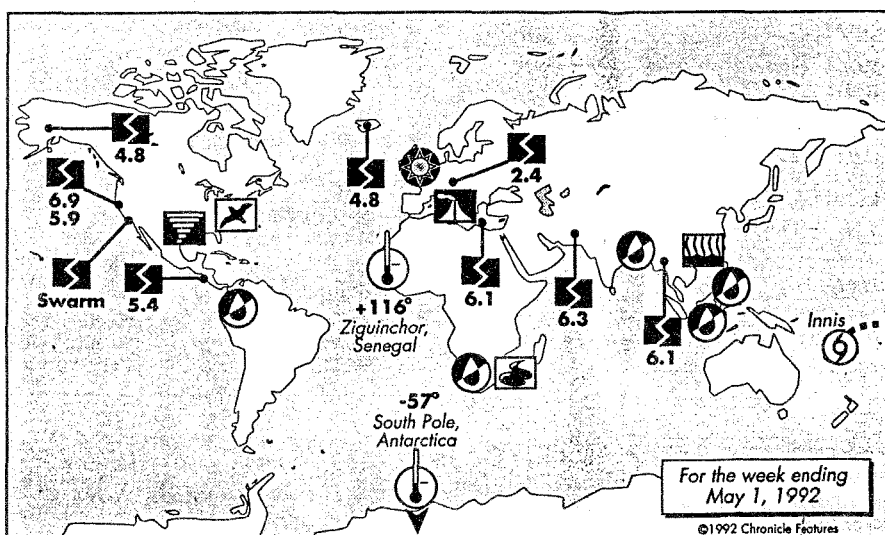
"We have been coming in at low speed from Honolulu to L. A. 22 - 26 April 92. We were struck by the enormous rash of radar anomalies in the two days attending the Northern California quake and its aftermath. We had ghosts and bogies and anomalous reflections all over both our radars, 3 cm and 10 cm. This shows yet again that an earthquake is accompanied by, and is perhaps wholly due to, a severe etheric disturbance. To me, it seems that the ether becomes extremely rarified and expanded over its normal states, throughout the 24 hour day. Not alone the radar anomalies suggested this, but also the ongoing work I have been pushing forward aboard here with a very promising new weather engineering device. I had become accustomed after several weeks work to the etheric normal, so to speak. Suddenly, as we approached the Pacific coast of the U.S., the ether became so thinned out, so stretched as it were, that no elastic responses were forthcoming. I was attempting to determine the reason for the bottom dropping out of the device's response from the ethers, when the radio announcement came of the heavy quake near Eureka, California."

TJC, 26 APR 92

Earthquakes

California was rocked at each end by powerful temblors that inflicted significant damage and renewed fears that "the big one" could soon strike. The hardest-hit areas were along the northwest coast. The small towns of Ferndale and Scotia were devastated by magnitude 6.9 quake, several strong aftershocks and resulting fires. In the Southland, scores of aftershocks followed a sharp quake centered near a small desert town. It caused moderate damage and minor injuries near the epicenter, but was widely felt from Tijuana to Santa Barbara.

Earth movements were also felt in southern Alaska, Czechoslovakia, western Nicaragua, northern Burma, Pakistan, Crete and Iceland.



From the *San Francisco Chronicle*, Saturday, May 2, 1992
Earth Week/ A Weekly Diary of the Planet, by Steve Newman

ON THE TRAIL OF THE LAKHOVSKY M.W.O.

by Jorge Resines

INTRODUCTION

When I wrote "The Lakhovsky Radio-cellular Oscillator" (Jan-Feb 1992 JBR), making a synopsis of information released by Georges Lakhovsky himself, I indicated my doubts on the quality of the information, and in the end, how in my opinion he was pursuing (at least) two very different lines of research. Later, I thought it proper to have a greater understanding of the technology from Lakhovsky's time of early researches, so I went in to the library of the Argentine Scientific Society to try obtaining more data.

My search was rewarded with the book *Les Ondes Electriques Courtes (Short Electric Waves)* by Mr Rene Mesny, the French Navy's Professor of Hydrography, which was no more than the publication in print by Les Presses Universitaires de France (Paris, 1927) of a lecture given by him.

In this present writing I will show the schematics given by Mr Mesny together with a brief explanation (based on his writings) and the corresponding reference publication, so that whosoever wants to know more on the subject can go directly to the source. This I do because many of the references given in Mesny's work are not available to me; hence, I will also refrain from a deep analysis of the information for the present.

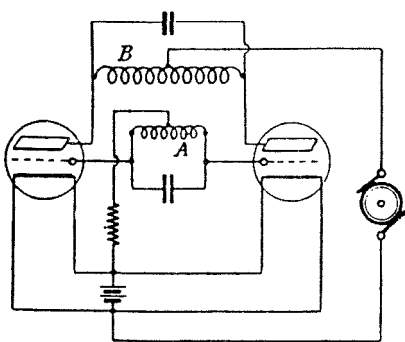


Figure 1

In the early days of radio, there were problems associated with the generation of short waves, due not only to the primitiveness of the equipment but also to defective manufacturing. Figure 1, directly above, is a "symmetrical arrangement" employed to circumvent those troubles for the oscillations generating the short waves happen only in oscillating circuits "A" and "B".

You will notice how AC and DC were mixed in a single circuit; this feature is almost non-existent in today's broadcasting equipment.

A simplified version of the symmetrical arrangement is seen at Figure 2. Please notice how close it is to the Lakhovsky Radio-Cellular Oscillator that I have shown as Figure 9 in my former writing. The only difference seems to be the replacement of the DC batteries in Figure 2, by a filament/high-voltage transformer.

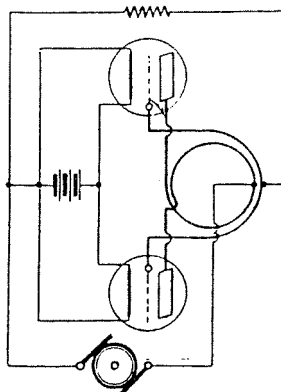


Figure 2

Now, one interesting feature that must be in every wave-broadcaster is a stable frequency. One such frequency-stabiliser was invented by the French Radio-Electric Society and is shown in Figure 3.

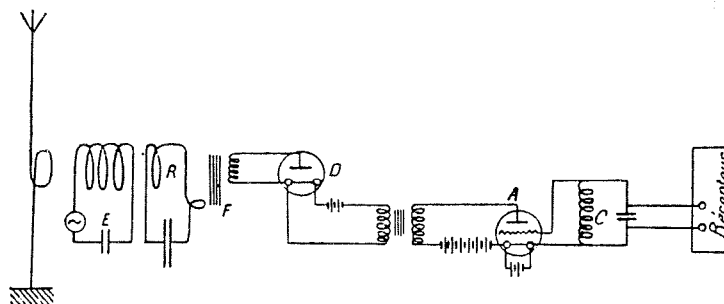


Figure 3

It employs iron's properties of magnetic saturation (see the magazine *Onde Electrique*, Volume No 5, pp 237-263, June 1926) and it uses a powerful triode "A" which generates oscillations directly into circuit "E", exciting the antenna directly. Coupled to "E" is

the circuit "R", wound partially over an iron core "F". Any variation in this core's saturation will change its permeability and consequently the inductance in "R", allowing either an increase or decrease in broadcasting. The whole setup shown is, according to the French text, an emitter; yet at the extreme right appears the word "recepteur" meaning receiver. Maybe an analysis of the whole original reference in *Onde Electrique* magazine will show the reason for this discordance.

The "great-granddaddy" of today's satellite TV antennas appears in Figure 4. It is a parabolic reflector of 340 centimeters in wavelength and an aperture of 600 centimeters. Its job was to focus in a narrow beam (with the minimum of dispersion for that time) of the broadcast. While reading *Waves That Heal* by Mark Clement I found out that the MWO had a transmitter and a resonating receiver, yet there was no specific technical data pertaining to either in the book. I, for one, would like to know what led Georges Lakhovsky from the Radio-Cellular Oscillator (as already explained) to the Multi-Wave Oscillator in which the antennas differ from those of the time, such as the one seen in Figure 4.

As for the receiver themselves, Mr Mesny quotes the work *Les Lampes a Trois Electrodes* by one Mr C. Gutton (Also published by Les Presses Universitaires de France in a collection *Conferences-rapport de documentation*) indicating something not usually thought of nowadays such as including negative resistance in the circuit. One kind of this circuit is seen at Figure 5, Where the coupling is by means of (ferro-)magnetism and the received broadcasts are heard through the earphone "(E)".

Figure 6, shows us a coupling that is effected, at the same time, by ferro-magnetic and electric means. Mr Mesny indicates the

most used arrangements are those made by one Mr Reinartz and one Mr Bourne.

The idea of using negative resistance in circuit was first suggested by one Mr E. Froi (See *Onde Electrique*, Volume No 2, pp 168-173 and 636, 1923) and a simple circuit is

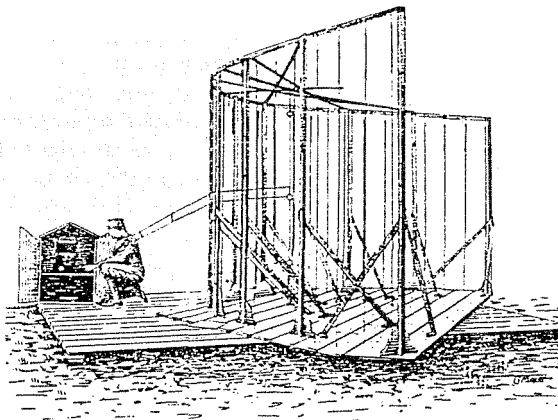


Figure 4

shown at Figure 7. There, the adjusting of condenser "C" imparts within resistance "R" a more or less important portion of current "(C)", as the dampening of the circuits is modified. The most optimum operation is

This idea was called a "reactive circuit" or a "circuit by reaction"; yet, formerly, Mr E.H. Armstrong (see *Proceeds. of the Inst. of Radio Engineers*, Volume No 9, pp 3-27,

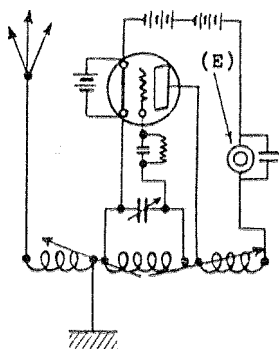


Figure 5

achieved without changing the parameters, according to Mr Mesny.

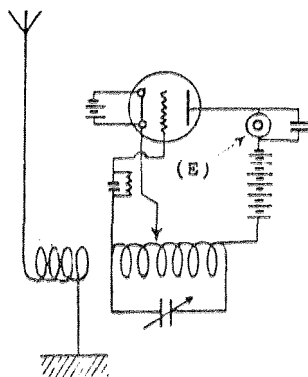


Figure 6

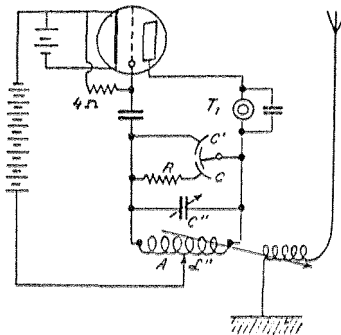


Figure 7

1921, and *Onde Electrique*, Volume No 1, pp 625-636, 1922) had developed what he called a "Superreaction circuit" and which is shown in Figure 8.

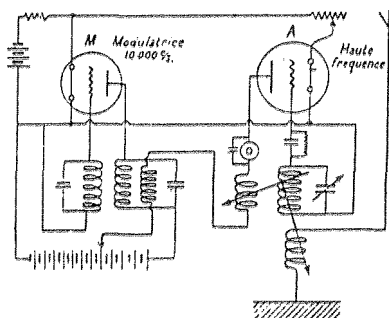


Figure 8

Mr. Armstrong's idea, called "Superheterodyning" today, was based on the superimposition of two frequencies, to yield four more frequencies in the end; all of them 'alloyed' to give a greater and more efficient output in early radio-broadcast. In the "superreactive" circuit of Figure 8, we have a triode of high-frequency ("Haute Frequency") in which the grid is fed by a DC voltage upon which is superimposed a pulsation of 10,000 cycles per second produced by the modulating ("Modulatrice") triode lamp.

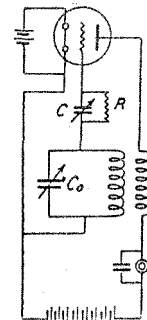


Figure 9

Mr Fromy's own system of "Superreaction" is seen at Figure 10. He achieved the same effect by shunting a capacitor (or several of them), to the triode's grid, possessing a strong capacity together with a resistance "R" of feeble power (see *Onde Electrique*, Volume 4, page 200, 1925) Mr Mesny refers the reader to the treatise *La Superheterodyne et la Superreaction* (Heterodyning and Superreaction) by one Mr Hemardinquer, published in Paris by Chiron Editeur, no year indicated. A receiver employing superreaction is seen in the schematics of Figure 10. Detection is accomplished through variations in current at the "Modulating" triode's plate during the alternation of oscillations during superreaction. Note, please, the similitude of this superreactive receiver with Lakhovsky's "Radio-Cellular Oscillator" as given. No indications in the bibliography are given about his type of receivers, but perhaps they are covered in Mr Hemardinquer's work.

Now if Lakhovsky himself indicated very short waves were needed in his oscillators (at least, in the beginning of his researches), how to generate and measure them?

Mr Mesny himself used the arrangement of Figure 11 to generate waves with a length of one meter (see *Onde Electrique*, vol 3, pp 25-37, January 1924).

Yet, shorter waves of 80 centimeters (or 0.8 meter) were achieved by one Mr Laville using "common triodes" in the arrangement

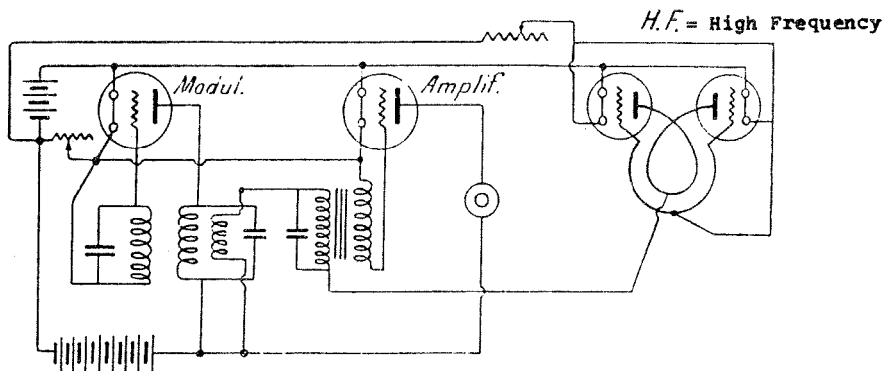


Figure 10

of Figure 12. Though no reference was directly given for consulting, reading the bibliography disclosed the existence of the thesis, **Recherches experimentales sur la propagation des ondes electromagnetiques le long des fils** by one Mr G. Laville, published by Masson in 1924 (no place of publication is given, but it is safe to assume it is Paris as the most important publishing houses of France are located there).

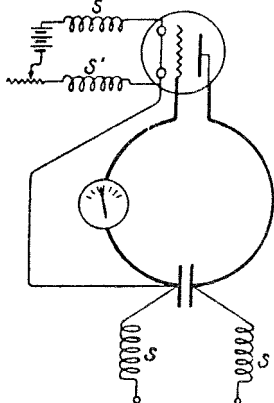


Figure 11

Another way to generate very short waves (of about 43 centimeters) was found by the German scientists Barkhausen and Kurz:

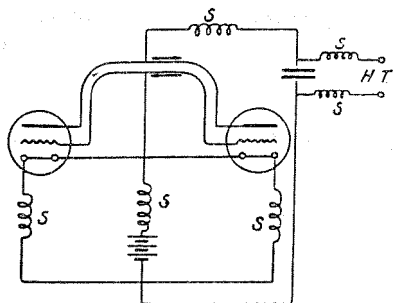


Figure 12

This they did in 1919 (see *Physicalische Zeitung*, Vol 25, page 1, 1920) and a few years later the scientist Scheibe improved on the idea producing waves from 30 to 334 centimeters (see *Annalen der Physik*, Vol 73, pp 54-

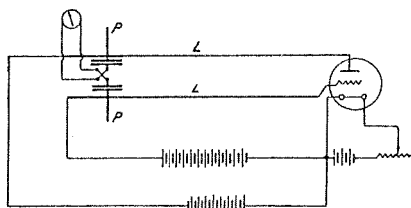


Figure 13

88, year 1924).

Experiments were undertaken by the British scientist Mr R. Whiddington (see *Radio Review*, Volume 1, pp 53-58, 1919) and by Gill and Morrell (see *Philosophical Magazine*

Vol 44, p. 161, 1922, and Vol 49, pp 369-379, Feb 1925) using a setup similar to the one illustrated at Figure 14.

Please notice that I have eliminated pertinent technical explanations concerning the devices by Barkhausen-Kurz, Whiddington, and Gill-Morrell, as they would be far too extensive for this article. Those investigating the references themselves, do take note.

After reading the pertinent portions of Mr Mesny's work, I felt myself closer to the full understanding of Lakhovsky's "Radio-Cellular Oscillator", yet I also felt myself no closer to that of the Multi-Wave Oscillator. These points are yet to be cleared:

1. How many (and which kind) of vacuum tubes (either by him or from others) were included by Lakhovsky in his MWO?
2. How much of the "Radio-Cellular Oscillator" entered (or not) into the MWO?
3. Which researches lead Lakhovsky from the Radio-Cellular Oscillator into the MWO and what initiated them?
4. Is there a "Final" or "Ultimate MWO" (capable of curing all illness) or just one model of a kind that is fit to heal a given group of diseases?

Any datum clearing these points (and others I have been unable to formulate) is valuable, no matter how small you think it is. So, in case you have anything, please send to the Journal of Borderland Research for us all to know....

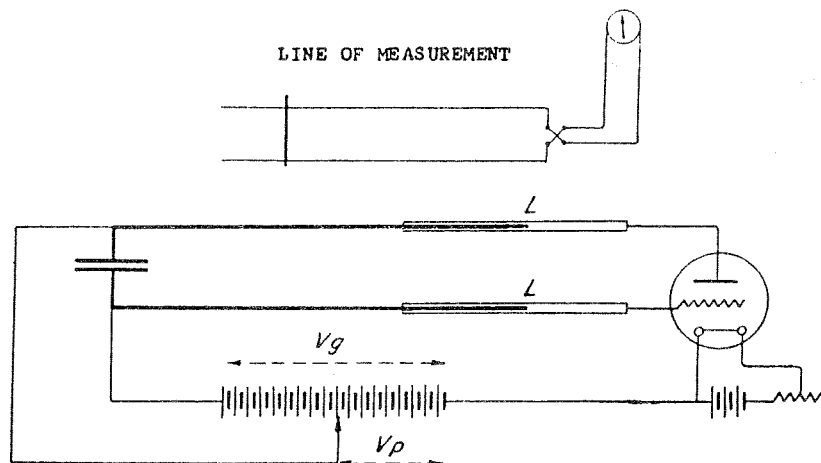


Figure 14

VIEW FROM THE BORDERLANDS

BY TOM BROWN

SOME MWO/RCO QUESTIONS ANSWERED!

*In response to Jorge's questions and also to collect my thoughts on this matter, after completing the third revised edition of **The Lakhovsky Multiple Wave Oscillator Handbook**, I would like to present what my general conclusion is at this point in time on the Multiple Wave Oscillator and Radio Cellular Oscillator. I know that some readers will think we belabor this field of research, while others keenly await any development. I didn't start this; BSRF has been investigating this area since I was in grade school, and I have kept up with the demand for information, although my primary interests definitely lay elsewhere. However, we have come a long way in understanding what Georges Lakhovsky was up to and it has been an exciting period of discovery.*

Lakhovsky's researches indicated that electric fields in the radio-frequency range can be generated in such a manner as to regenerate diseased (but not overly necrotic) tissue. This was well documented in medical research in France and New York.

Borderlanders were first introduced to this idea in 1963 when Dr. Robert (Bob) Beck gave us his interpretation of Lakhovsky's "rejuvenation machine". He claimed to have had access to an original, but 7 years of inquiry have led me to believe this was an exaggerated claim. Beck is known as a meticulous documenter of all equipment he comes across, as anyone who has seen him give a presentation would know. I am basing my opinion on the available evidence which includes having asked Bob for any proof of the original, be it picture, schematic or whatever, as did Riley Crabb before me. It is my opinion that Beck interpreted the Lakhovsky Patent #1,962,565 which was circulating at the time thanks to George Van Tassel's work on the Integratron in the California high desert, an all-wood building claimed to be designed by extraterrestrials as a "fountain of youth". Van Tassel claimed in his writings that the Integratron was also based on the above mentioned Lakhovsky patent. Dr. Beck was no stranger to the Integratron happenings and was known to have attended some of Van Tassel's meetings in the desert.

The fundamental difference between the two types of equipment (Lakhovsky's and Beck's) can clearly be seen by simply looking at pictures of Lakhovsky's units, with their two leads feeding the outer ring of the concen-

tric ring antenna, and Beck's with their single wire feed. Lakhovsky used copper tubing suspended in space for his antennas allowing them to oscillate freely both physically and electrically and Beck used printed circuit antenna boards which allows neither. We know from first-hand reports that Lakhovsky's MWOs did not arc between the antenna rings and Beck's MWOs are based on this arcing taking place. However, there is a similarity between the two in that they both create a field of multiple wavelengths, but certainly of different quality and character. Lakhovsky's units were scientifically documented in curing certain types of cancer. Many users of Beck's equipment have claimed such, but there are only anecdotal references and unfortunately no documented research, even after over a quarter century of their usage.

In answer to Jorge's query, the Radio Cellular Oscillator was the first type of radio-frequency generator that Lakhovsky used in his electrical researches. He found this to be a successful type of unit, but he felt that there was the potential danger of thermal damage to the tissue from extended use of the continuous wave output. In one sense he took a technological step backwards by moving to a spark gap driven Rhumkorff coil (what most people erroneously consider to be a Tesla coil) feeding a pair of concentric ring antennas. Lakhovsky stated that he used damped waves (created by a quenched spark gap) to eliminate the potential for thermal damage. This is mentioned in the excerpts from **Radiation and Waves -- The Source of Our Life** from Mark Gallert's **New Light on Therapeutic Energies** and reprinted in the **Lakhovsky MWO Handbook**. However, we have the evidence, published in the March-April 1992 JBR, that Lakhovsky's son was selling a version of the RCO long after his father's death. There is no doubt that the RCO is an easier technology to duplicate and it can be designed as a radio-frequency white noise generator that will not cause any thermal damage to tissue. As Jorge's research shows shortwave transmitters were in their infancy at the time of Lakhovsky's preliminary excursion into that area.

The Radio Cellular Oscillator bears a distinct relationship to a device published in this Journal in 1975 called the Phoenix Radioclast. The Phoenix Radioclast was a radio-frequency generator in the 43 mega-

cycle range with a 2000 cps modulation. (A reprint of this information with schematics is available from BSRF for \$2 pp.) Anecdotal claims of healing were made for this device at the time.

The exact configuration of Lakhovsky's MWO is still unknown to us, but we hear that there are a number of original units still in existence in Europe. We expect that someday we will gain the general wiring diagram which would include the exact circuitry of the antenna feeds. It is my feeling that the ideas of Eric Dollard first published in the May-June 1986 JBR, based on his extensive knowledge and insight, are fundamentally a move in the correct direction, though I think that Mike Theroux's suggestion at the end of this article may be the closest we have seen. While Lakhovsky states that his units are electrostatic his two antenna feeds to the outside ring (which we have established absolutely as the correct configuration on the equipment he used in his published researches) would generate an electromagnetic field, with the inner concentric rings acting as secondaries to the outer ring primary. In general this unit could still be considered electrostatic with damped waves from the spark gap. The Beck MWO definitely creates an electrostatic field which would create an oscillatory shock to the treatment subject, but in a different manner than Lakhovsky's units. There is a similarity and a difference, all of which has been pointed out in this Journal over the last six years. We also have the report from John Andrews (Jan-Feb 1992 JBR) that he reproduced the *effluvia* as per Lakhovsky's records by splitting the single terminal feed into two. The third revised (1992) edition of the **Lakhovsky MWO Handbook** covers our entire MWO/RCO file up to the March-April 1992 Journal, and is recommended to any serious researcher in this field as the most complete record in English of MWO/RCO research.

Lou Schadt's Spiral Coil MWO is an important development in this field and Peter Lindemann's Electrostatic MWO is an outgrowth of that. These two devices are working with weak (but biologically powerful) electrostatic fields (created by antenna motion and not electrical input) and what I would consider within the realm of true radionics (not psychotronics), that is the relationship of energy to structure. This could also be considered as orgone related as they both are powered by ambient electrostatic potential. My personal feelings are that the Spiral Coil and Electrostatic MWO are the way to go in advancing MWO research. There is also current research being done on the RCO and related circuitry, of which we hope to hear more from serious researchers.

There is a lot of electro-therapeutic equipment (including alleged Rife devices and various MWOs) being sold these days with the claim that they are not for medical use. None-the-less I would have to consider myself stupid if I thought that everyone was building and buying these units purely for research. The information and equipment that BSRF makes available really is intended for research purposes and we don't say that with a nod and a wink. If I knew for sure that a specific reproducible device would cure any disease I would say so without fear or trepidation and provide the plans. To those who do use this information we sincerely hope that you provide BSRF with documentation on use and effect. This is an experimental field, with exact details of the original equipment still in question, and to rely on this for health one has to base their motives on faith and not on fact. This is extremely important and is the fundamental purpose for our making all this available. It is our avowed policy to discourage people from relying on experimental equipment as a healing modality. Not that there isn't a basis for thinking that there is promise in this field of research, but as stated before there are still many questions to be answered,

not the least of which is the mass of information now becoming available on the disastrous health effects of electricity and electrical fields. Much needs to be sorted out here.

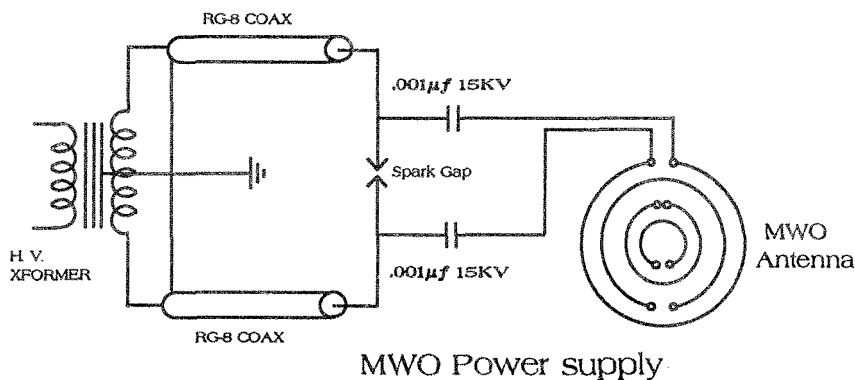
Rudolf Steiner pointed out in his Agriculture course (circa 1924) that just because electricity was now available there were prophets who claimed it as a great cure, not withstanding that there were no such prophets before electricity was available. He also pointed out that with radio signals information could be transferred around the world at amazing speed, but that the effect of the electricity was such that people couldn't comprehend the information as well as they used to! This is an important caveat to consider before any experimentation with electrical equipment (including computers!).

There are avenues of research into biologically positive energies that do not partake of the subsensible electrical currents. L.E. Eeman's biocircuits are a well documented means of balancing the body's energies and it is merely a sign of the times that there is very little interest in such (not as sexy as an electrostim unit!). Color therapy is also an important area of research (electricity is used to power the light source but its electrical effect on the

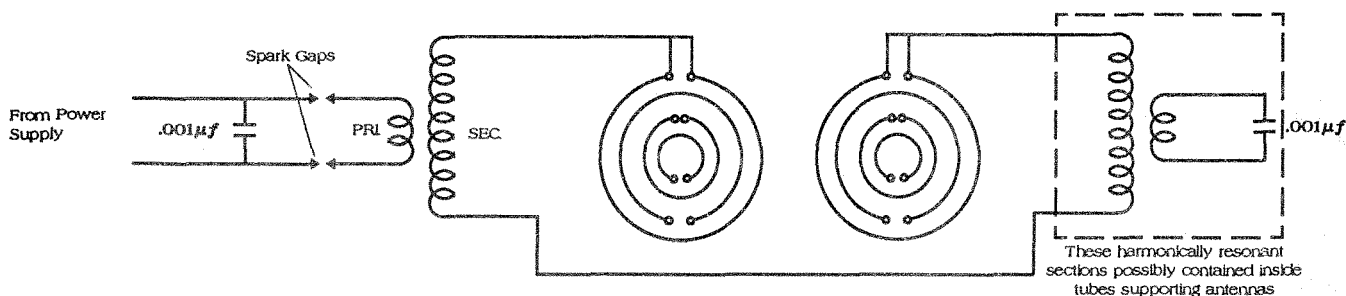
experimental subject would be negligible). Dr. Wilhelm Reich's orgone energy research also indicates that there are potent non-electrical energies that are incredibly bio-positive if applied in the correct manner. Competent research needs to be done in all these areas, and this Journal is open to all ideas of this character.

And in closing I must state that there is the more refined view of disease, that it is a problem of alignment between physical and etheric. Rudolf Steiner indicated that the etheric is always healthy, but when out of phase with the physical we experience health problems. Our true purpose in the Borderland fields of research is not to cure disease, but to learn how to attain the supersensible overview of our existence -- *to reach beyond the borders of our senses*. Our orientation is of course to seek across the upper borders of the senses. Electricity is a sub-sensible force, beneath the senses, and is an organic system alterant. Whether it alters a system for better or worse depends on many factors, state of mind, diet, life-style, etc. It is very possible that many claims for various devices are based on placebo effect. That is why we support serious research and not widespread equipment sales.

Eric Dollard's suggestions for single antenna hookup



Michael Theroux's ideas for two antenna hookup based on the photographs of Lakhovsky's apparatus.



MWO ROUNDUP

by Peter A. Lindemann

After years and years of guessing, hoping and wondering what Lakhovsky was really doing, the fish is about to hit the pan! In the last two issues of this journal, a number of schematics have been reprinted for devices capable of producing oscillations of multiple wavelengths simultaneously. In this article, I will present another schematic of an easy to build MWO submitted by an associate from Texas. But first I would like to go over some of the basic information that all of this is about and attempt to make some sense of it, finally.

The understanding that I now present is based on an article written by Georges Lakhovsky in 1941 entitled Radiations and Waves - Source of Our Life, excerpts of which appear on pages 98 - 100 in The Lakhovsky MULTIPLE WAVE OSCILLATOR Handbook, second edition, by BSRF.

Quoting Lakhovsky, "I have shown in my books, The Secret of Life, and especially in The Earth and Ourselves, that every living cell draws its oscillatory energy from the field of secondary radiations resulting from the ionization of the geological substances of the earth by cosmic radiations." By this I believe he is saying that there is an energy coming to this planet from outer space that enters the earth and causes a reaction that brings into being a secondary energy field that every living cell draws its oscillatory energy from. At first glance, it may not register, but on careful examination, this "model" is entirely consistent with that of Wilhelm Reich's Orgone Energy model. Reich states that a great stream of Cosmic Orgone Energy bathes the planet and that this feeds the planetary orgone envelope that supports all of the life on the planet. Both Reich and Lakhovsky agree that anything that interferes with this process cause for some disease condition.

Lakhovsky also clearly saw that these secondary energies coming to us from the

ground were not always beneficial, depending on the geological formations underneath. "But certain natural radiations are particularly toxic, especially those originating in earth programs [coarse ground formations]. Many cancer cases have been attributed to these toxic radiations and proven experimentally, notably in Germany by Dr. Rambeau of Marburg. Therefore, earth radiations sometimes cause disturbance of the cellular oscillatory equilibrium of the organism." Here, when Lakhovsky refers to "natural radiations" that are toxic, he was not talking about radioactive emissions or chemical poisons, but what are now called geopathic zones.

"To re-establish this equilibrium, I

plants inoculated with cancer. For six years at the Saltpetriere I observed and checked the effects of these short waves. Using very low power, from 10 to 12 watts, and a limited duration of treatment, I succeeded in curing cancer in human beings, but also had to record some failures."

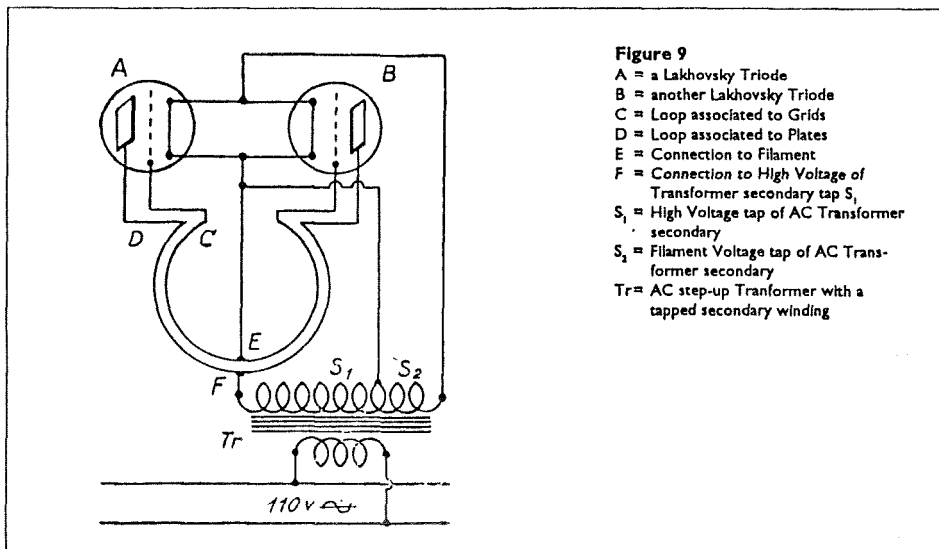
Lakhovsky goes on to say that by 1928, the news of his successes had caused widespread interest in Europe, and that researchers were building higher and higher powered units. He felt that more power just caused dangerous thermal effects that could kill micro-organisms but also healthy cells. This is no doubt the advent of today's Diathermy machines, a direction that Lakhovsky clearly rejected.

At this stage, he changed his fundamental assumption. "I thought it possible to obtain better results by administering an oscillatory shock to all the cells in the organism simultaneously. Such a shock, very brief, produced by dampened or weakened electro-static waves, does not provoke thermal and prolonged effects and involves no risk of burning

living cells." Mind you, before this, Lakhovsky had already succeeded in curing various cancers with 10 watts of electro-magnetic propagations between 2 and 10 meters. Also, he never mentions that thermal effects are a problem at these power levels. These "Radio-Cellular Oscillators" were his first successful device and they remain very, very effective for many disease conditions. But he was not satisfied.

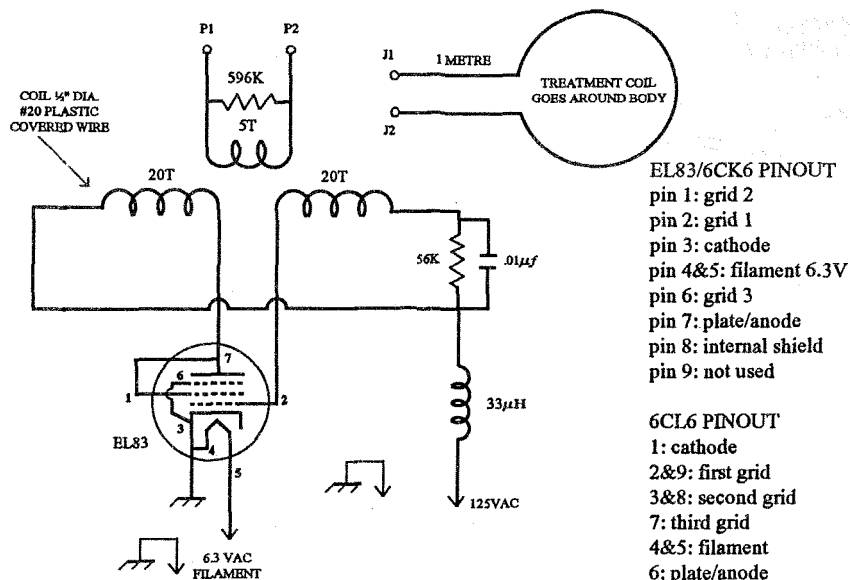
"After much research I was able to construct an apparatus creating an electro-static field covering all frequencies from 3 meters to the infra-red, so that every cell can find its natural frequency and vibrate in resonance." Here, Lakhovsky shows us his reasoning. He rejected higher power outputs and went for a broader spectrum of shorter wave lengths. He also set aside electro-magnetic propagations, for the time being, and began experiments with the electro-static side of the energy.

"We know that in physics, a circuit fed by damped or weakened high frequency currents creates many harmonics. Consequently, I conceived an oscillator of multiple wave lengths with a broad scale in which every organ, every gland, every tissue, every nerve,



thought of creating, in 1923, a constant compensating field of very short radiations (2 to 10 meters in wave lengths) to neutralize the action of the disturbing rays, and give the living cell the necessary stimulation for a return to its normal oscillation." "Finally I adopted the oscillator with symmetrical cross leakage comprising two triodes. The oscillating circuits formed a single spiral, branches between the two grilles and the two anodes. It was fed directly by alternating current from the local supply circuit." This clearly describes the Radio-Cellular Oscillator circuit we printed as figure 9 in the Jan-Feb 1992 issue of this journal in the article by Jorge Resines on page 4 and reprinted here. "With this short-wave apparatus I was able to cure

Lakhovsky MWO/Radio Cellular Oscillator submitted by Patrick Flanagan

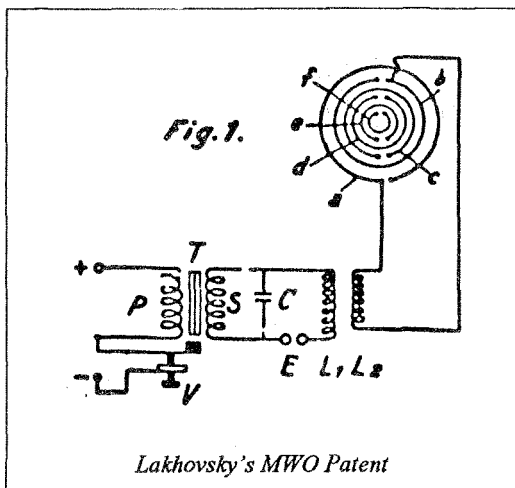


could find its natural frequency." It is at this stage that he introduces the now famous antenna of concentric rings. "To obtain this result I set up a transmitter composed of a series of circular concentric oscillating circuits linked by a silk cord but not contiguous. These circuits are stimulated by damped high frequency currents from a spark gap. Thus each circuit of the transmitter vibrates not only on its natural frequency, but also on numerous harmonics." "Thus, I built an oscillator with all the basic wave lengths from 1/10th of a meter to 400 meters. But each circuit also emits many harmonics, which with their basic waves, their interferences and their effluvia can reach the scale of infra-red and even that of visible light."

Notice here that Lakhovsky never mentions power outputs or high voltage in the output circuits. Also, in Fig. 1 of Lakhovsky's 1931 US patent #1,962,565, a very simple drive circuit of an interrupted inductor feeding an L-C spark-gap oscillator is shown. But notice these important details. First, the output coil L2 has fewer windings than L1 so that the voltage is stepped down to the antenna. Second, that the antenna connection is for electro-static output as it is an open circuit of differential capacitance, the two output leads connected to separate rings. In spite of his references to electrostatic outputs, Lakhovsky leaves this issue wide open. Quoting from the body of the patent, Lakhovsky states, "One or several points of this high frequency circuit is or are connected to the end of one or several of

the rings forming the radiating apparatus. The other rings not connected are excited by induction." This broad statement is typical of patent 'lingo' and clearly leaves unresolved the exact output connection.

Two last points should be mentioned here. Lakhovsky speaks of his output circuit being "stimulated by damped high frequency currents from a spark gap". The question is, what is a damped oscillation? Tesla also used



such terminology and it is from his writings that I draw my conclusion. I speculate that this could refer to the oscillations produced across a quenched spark-gap. Spark gaps tend to ionize gas particles between the two electrodes and the presence of this conductive plasma creates a tendency to sustain the arcing process. A quenched gap reduces or

eliminates this tendency thereby sharpening the transitions between the on and off phase of the spark. This intensifies the nature of the oscillations and produces extremely high harmonics. My guess is that in Fig 1, E, in the L-C oscillator section of the circuit, is a quenched spark gap. The other speculation I would like to add here is about the construction to the concentric ring antennas. For the last 30 years here in the USA, these antennas have been made of copper foil on a dielectric material, like a printed circuit board. BSRF has been a major source of these antennas. Recent experiments that I have run suggest strongly that this design adds unwanted capacitance to the output circuit and could clip off the very short wave emissions from the output. This would be even more pronounced in a system set up for electro-static output as Lakhovsky specifies in his patent. Only a sequence of copper rings, suspended in the air, like Lakhovsky shows, would be free to oscillate up into the gigacycle range, without any arching between the rings. These printed antennas do work well, however, with the RCO.

After all this, I now must say that there is nothing sacred about any of these circuit designs. I'm a strong believer in the motto "if it's not broken, don't fix it", however, there are many ways to produce the effects Lakhovsky was producing. Even Lakhovsky states in his 1931 patent, "These rings may be fed by any producing device whatever of high frequency..." This is well illustrated by the schematic published in the March-April 1992 issue of this journal submitted by Pat Flanagan. This circuit, while resembling one of the earlier Radio-Cellular Oscillators, seems capable of producing waves well below 1/10th of a meter (as Pat told me that it interferes with his satellite TV reception!) and therefore should be considered associated with Lakhovsky's later work on the MWO. The output of this unit is not electrostatic. In fact, Borderland has found no evidence at all that any of Lakhovsky's units actually operated in the electrostatic mode, regardless of his 1931 patent claims.

Here then is the difference between the RCO and the later MWO. The target of frequencies for the RCO was between 2 and 10 meters. With this, Lakhovsky was able to cure cancer and many other conditions. It seems to stimulate the organs and glands and promote de-toxification. The researcher whose RCO schematic follows, says that 43 megacycles (approx. 7 meters) is the primary target for a device like this and that its primary action is to cleanse the body and rebuild the organs. He has seen dramatic cleansing of the liver and bowels, reduction of

tumors, natural hair color returning in the elderly, and many more benefits including increased vitality. No doubt, Lakhovsky saw these types of benefits too. But he was not satisfied with success. He went on to make the MWO. The target of frequencies for the MWO was between 1/10th of a meter and 400 meters. He was not satisfied by stimulating the organs, he wanted to stimulate each and every cell individually also. For this he needed shorter wave lengths. He wanted to include a range of frequencies so that even the strands of DNA could find their own natural resonance and be directly stimulated by it.

The MWO, as conceived by Georges Lakhovsky, was not an intrusive influence, but one that promoted the natural healing processes of the body. "In all pathogenic cases this treatment gives very good results. As it does not attack the microbes directly, it does not destroy live tissue, but reinforces the vitality of the organism by accelerating cellular oscillation. It is therefore the reinforced organism that successfully resists the microbes and all pathogenic causes." Here then is the clear difference between what Royal R. Rife was doing and what Lakhovsky was doing. Rife discovered specific "mortal oscillatory rates" that were capable of killing microbes directly while Lakhovsky let a strengthened and normally functioning immune system do that work. Rife was working on the magic bullet while Lakhovsky was working on a shotgun panacea. Both apparently were successful!

On this page is the schematic from the Borderland Associate in Texas. He gave me permission to use his name, but did not want to be associated with the claims for his unit. I decided to use his claims, above, so his name is withheld here. Although he calls his unit an MWO, it is more correctly an RCO, based on a twin triode oscillator with target frequencies between 2 and 10 meters. Unlike any Lakhovsky built, this unit is a simple multi-vibrator based on the 6CG7, twin triode nine pin vacuum tube. It works. It can be built for about \$40 from this schematic. Make sure you get a good tube where both triodes operate equally well. The

coil connected to the tube in the drawing is 9 turns of #16 wire and the output coil connected to the treatment loop is 4 turns of #16 wire. Both are wound on a 3/8 inch diameter. You can also tap the output loop directly off of turns 3 and 7 of the 9 turn coil, but then your output loop is directly connected to the wall current and could really shock you if the insulation failed. The sample unit submitted to Borderland has the output loop connected

how many people want them.

Well, back at the ranch, things look pretty clear, but what a trail ride it's been. Just a few last words before I hang up my hat and dust off my boots. Lakhovsky was a student of nature. He saw that cellular oscillations could be influenced by electromagnetic waves from cosmic, atmospheric or telluric (earth) origins. His interest in machines was only to compensate for disruptive influences the body

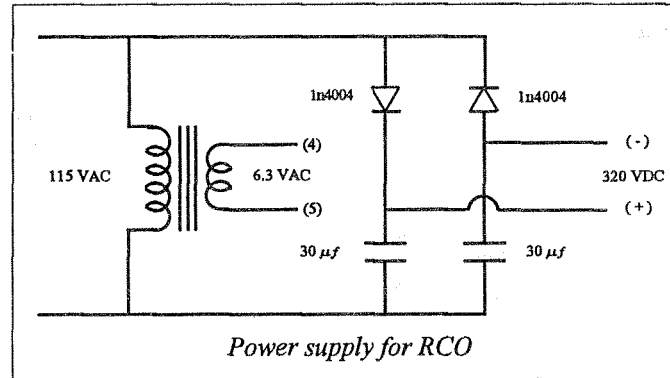
may have encountered. As with other natural healing modalities, Lakhovsky knew that his MWO could cure all diseases, but not all patients. Sometimes, a disease condition had progressed too far and the body had lost its ability to regenerate. In such cases, the MWO could not forestall the inevitable. Likewise, sometimes a simple copper loop around a diseased plant was enough to focus health giving rays of cosmic and telluric origins and cure cancer in the plant with no "machine" at all. Seeing that

Lakhovsky's focus was on the earth energies, it seems reasonable to assume that the effective use of such copper rings may be *location dependent*, as a copper ring around a plant in a geopathic zone may very well accelerate its death. The quality of the energy coming to us from the environment today is far more dis-

turbed and far less capable of sustaining vibrant life than in Lakhovsky's day. More and more locations are becoming life negative, or at least less life positive. This just makes it harder for all of us to stay healthy. The main message in the work of Georges Lakhovsky is not that we can now cure cancer with a new machine. Although this is good news, we should not lose sight of his other discoveries. I think Lakhovsky's primary message is that our health is directly connected to the quality of energy coming to us from the earth, and that it is essential to good health that we develop our sensitivity to these subtle forces so we can live in harmony

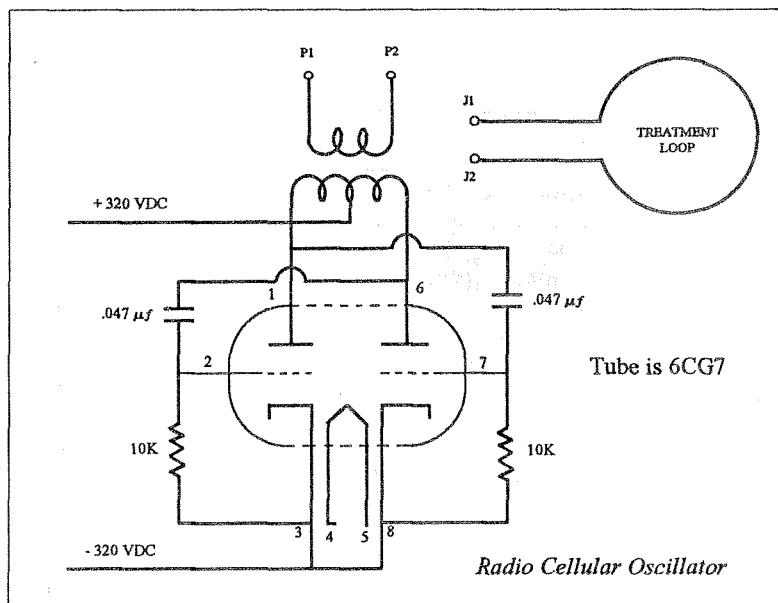
with its health giving rays. He developed the MWO to help people compensate for living in less than ideal environments. In the future, we may need these compensations more than ever. Adios.

★ ★ ★ ★ ★



directly. The treatment loop is 8 inches in diameter connected to 6 feet of #18 zip cord. The loop is made of some well insulated, stiff wire.

As we have in the past, a limited number of units based on this design may be made available for further research, either as a fully

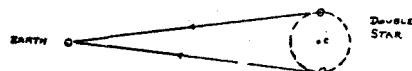


assembled unit, or as a kit. The retail price for the unit will be \$325 for non-members and \$275 for members. The kit will be \$175. As these devices have to be built in groups to keep the costs down, it is best to get your order in as soon as possible, so we can get an idea of

EXISTENCE OF ABSOLUTE TIME

by Dorotheos C. E. Cody

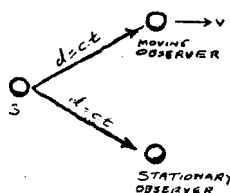
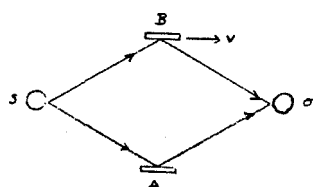
The present paper concerning the existence of Absolute time is based on Einstein's principle of the invariance of the speed of light. This principle asserts that the speed of light is constant in all inertial reference frames regardless of the motion of source or observer. This invariance in the speed of light can be demonstrated via observations on Double stars:



As the stars orbit about a common centre C, one star approaches the earth as the other recedes from it. Yet experiments show the speed of light from the approaching star equals the speed of light from the receding star, and both are

$$c = 3 \times 10^8 \text{ m/sec}$$

It is the properties of the medium ALONE which decide what the speed of a wave propagating through it will be.



From the Constancy of the speed of light, it follows if a light signal is sent from a source S, and travels the distance $d=ct$, the signal may be simultaneously received by both a moving and a stationary observer: provided they are both located the same distance ($d=ct$). If, instead of two observers, we have a single stationary observer placed at a strategic loca-

tion (point O) and two mirrors -- one stationary at point A and the other moving at velocity v -- the stationary observer will observe both light signals (reflected from the mirrors) simultaneously if the moving mirror is at point B, and the distance A-O equals the distance B-O.

RELATIVISTIC CONSIDERATIONS

According to special relativity, the length of a moving body contracts, and time intervals dilate in a moving reference frame when observed by a stationary observer. Consider, first, a ruler of length L_0 moving at velocity v . When observed by a stationary observer, it contracts in the direction of its motion to a length

$$L = L_0 \sqrt{1 - \frac{v^2}{c^2}}$$

Where

v = the velocity of the ruler

c = the speed of light

However, when observed by a moving observer moving along with the ruler at the same velocity v , it is not shortened.

The above apparent contradiction has been explained, in a previously submitted paper, by noting that the Lorentz-FitzGerald contraction phenomenon is merely an optical contraction; the ruler does not physically contract. From this, it follows, from a standpoint of the moving observer, the distance between two arbitrary points A and B is not contracted either.

The second concept related to the topic under consideration is the notion that time intervals dilate in a moving frame of reference. Time, in physics, is simply the duration between two events. Thus, if two events, separated by an interval of one second, occur in a moving reference frame, then the time interval between them as observed by a stationary observer dilates to:

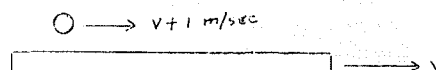
$$t = \frac{t_0}{\sqrt{1 - \frac{v^2}{c^2}}}$$

Where t_0 is the one second interval

From this, a significant fact begins to emerge: despite assertions to the contrary, relativity

theory HINTS at the existence of absolute time. This is suggested by the quantity t_0 .

Consider two events occurring in a moving frame of reference separated by the time interval t_0 . When observed by a stationary observer, the time interval dilates to t according to the above formula. But how does the stationary observer KNOW the time interval has dilated? Simply by comparing it with a stationary clock -- which ALSO registers the time interval t_0 . Thus the actual time interval in both reference frames is t_0 , but the interval of time in the moving frame of reference is merely OBSERVED by a stationary observer to dilate. From this, it follows that time dilation, like contraction of length, merely APPEARS to take place. This fact can be easily demonstrated by a simple experiment (described in a previous paper):



Consider a ruler 1 m in length moving at velocity v . Above it is a billiard ball moving at a velocity $v = 1$ m/sec. relative to a stationary observer. Thus the billiard ball moves at one metre per second relative to the ruler.

Since length contracts when observed by a stationary observer, but not when observed by a moving observer, the moving observer will observe that the billiard ball has moved a distance of one metre in one second. However, as observed by a stationary observer, the billiard ball has moved DURING THAT SAME ONE SECOND only a distance of

$$1 \text{ m} \sqrt{1 - \frac{v^2}{c^2}}$$

Thus the velocity of the billiard ball appears to have decreased, and since $v = ds/dt$ where s = distance, time appears to increase.

Thus to completely travel the distance of one metre as seen by a stationary observer requires a time

$$t = t_0 + \left(\frac{\Delta L}{V_a} \right)$$

Where

V_a = apparent velocity of the billiard ball

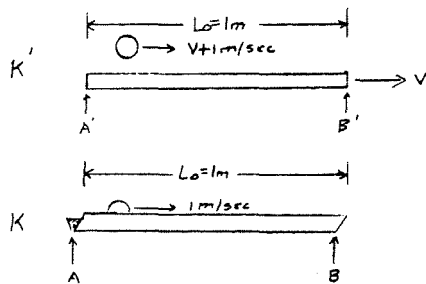
$L = L_0 - L$

L = contracted length of ruler

L_0 = rest length of ruler

The above experiment can be modified show that an interval of time in a moving reference frame, as observed by a MOVING

observer, is identical to an interval of time in stationary frame as observed by a stationary observer. This is done, simply by adding a second billiard ball moving at one metre per second relative to a stationary reference frame.



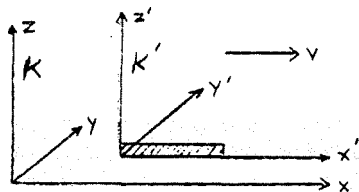
As the billiard ball in the moving reference frame K' arrives at point A' , the billiard ball in the stationary reference frame K starts moving from point A and moves at one m/sec relative to K . Since length is not contracted when observed by a moving observer, the billiard ball in the moving frame K' arrives at point B' one second later as observed by the moving observer. As it does so, the billiard ball in the stationary reference frame K arrives at point B (also one second later) as observed by the stationary observer.

Thus the interval of time between arrival at points A' and B' , observed by the moving observer in K' , is identical to the interval of time between arrival at points A and B observed by the stationary observer.

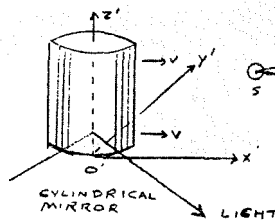
However under the right conditions, a single stationary observer can observe a time interval in a moving frame of reference as being identical to a time interval in a stationary frame.

The experiment to be described is based on two principles gleaned from relativity theory:

1. A ruler contained within a moving frame of reference K' will contract in the direction of its motion when observed by a stationary observer, but will not contract when viewed by a moving observer moving along with it.



2. The invariance of the speed of light in all inertial reference frames, regardless of the motion of source or observer.



Consider two stationary mirrors $M1$ and $M2$ arranged as depicted in the diagram. A third mirror, cylindrical in shape, is moving at velocity v . It is assumed that the cylindrical mirror is located at the origin of a moving reference frame K' . The velocity v is $1/3$ the speed of light.

A pulsating light source is located at point S and flashes at the rate of once per second, and a stationary observer is strategically located at point O .

When the moving mirror is at point A , the light source S flashes, sending its first signal. The signal arrives at points $M1$ and B simultaneously. As the signal arrives at point B , the moving mirror arrives at point B as well. Thus the signals are reflected from points B and $M1$ simultaneously.

The distance between points B and O is equal to the distance between point $M1$ and O . Hence the observer observes both reflected signals simultaneously.

One second later, the light source flashes again, sending its next signal, and the signal arrives at points C and $M2$ simultaneously.

As the signal arrives at point C the moving mirror also arrives at point C . Thus the signal is reflected from points C and $M2$ simultaneously as well. The distance between points C and O is equal to the distance between points $M2$ and O . Thus the observer observes the reflected signals from points C and $M2$ simultaneously.

Thus an amazing fact begins to emerge: the first signal is received from points $M1$ and B simultaneously, and the second signal is received from points $M2$ and C simultaneously. Thus the interval of time between receiving the signals from points B and C was IDENTICAL to the interval of time between receiving the signals from points $M1$ and $M2$.

In other words, an interval of time in a moving reference frame K' , in which the moving mirror was situated, was perceived by our STATIONARY observer as identical to a time interval in a stationary reference frame K . No time dilation has occurred, as relativity suggests, even though the velocity of the mirror was at relativistic speed ($v = 1/3 C = 1 \times 10^8$ m/sec)

From the foregoing experiments then, one can assume that time dilation only appears to happen, and that absolute time does

indeed exist. Absolute -- or Newtonian -- time is indeed an absolute reality.

SOURCES

Einstein, Albert A., *Relativity: the Special and the General Theory*, (New York: Crown Publishers, 1961).

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N.I. Koshin and M.G. Shirkevich, *Handbook of Elementary Physics* (Moscow: Mir Publishers, 1982).

William Gordon Allen's

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FiziKorner⁺

with Peter Lindemann

The sun has always been the greatest source of energy on this planet. But for many reasons, solar power has not made a major contribution to our modern energy usage. The biggest problem is availability. As a power source, the sun is there only half of the time on ideal days, and less during inclement weather. But there are other problems as well. Many involve a lack of innovative development.

Solar power really only became a viable product with the development of the photovoltaic cells used by NASA for powering satellites in earth orbit in the 1960s. But, while over 90% of satellites are powered by solar energy, very few homes or other buildings here on earth are solar powered. The reasons are clear. A \$9,000 system from the REAL GOODS catalog (a very good source) produces only about 2.7 KWHs of electric energy on a sunny day. Here in Oregon that electricity, purchased from our friendly Utility, would cost less than 15 cents! I'd have to run the system for 60,000 days or 164 years to pay for it. What's more, 2.7 KWHs of electricity is only a fraction of what I usually use in a day. Let's face it, this is not being competitive.

But Tesla, in his masterful article "The Problems of Increasing Human Energy", first published in 1900, says that the sun's rays beat the earth with the equivalent of 4 million horsepower per square mile. Well, that sounds like a lot, but let's break this down so it is easier to see what it means in a practical sense. A mile is 5,280 feet. A square mile is this number squared, or 27,878,400 sq. ft. If we divide the 4 million hp by our 27+ million sq. ft. we get .143 horsepower per square foot. Using standard conversions (which we know are not absolute maximums) this comes to about 107 watts of electric power available per square foot. Our REAL GOODS system mentioned above, produces power at a rate of about 12 watts per sq. ft. That's only about 11% of Tesla's calculation. Surely, there must be something better.

And there is! What's more, you have one in your kitchen. It's called a heat pump. Usually these systems go by other aliases, such as "Refrigerator" or "Air-Conditioner", but really, they are just heat pumps. Have you ever noticed that it is warmer behind your

refrigerator? That's because it pumps the heat out of the inside and gets rid of it on the outside in back. The inside of your refrigerator is used as the SOURCE of the heat and the outside is used as the SINK for the heat. As you might expect, the warmer the SOURCE area is and the cooler the SINK area is, the more efficiently the heat pump works. Even the casual observer may notice right away that the refrigerator is doomed to be relatively inefficient because it runs in a situation where the source area is cold and the sink area is warm. For the most part, heat pumps have always been used in these low efficiency situations. Even as a home furnace, the heat pump is drawing heat from the outside, usually when it is cold, and using it to warm up the house. But even in this less than ideal mode, the heat pump uses less than half of the electric power it would require to heat the same home with ordinary electric heat.

The question is, what would happen if we put a heat pump in a really efficient situation? What would that look like? Well first of all, the SOURCE area would be hot and the SINK area would be cold. To accomplish this, we could solar heat the source area and put the sink area about 15 feet underground where it is about 55 degrees and capable of absorbing tremendous amounts of heat. Next, we could devise a heat engine system that ran on the heat exchange process. All this sounds straight forward enough for someone to have tried already. The fact is, it has been tried.

Back in the old "Energy Crisis" days of the 1970s, an investment group was formed in the State of Washington with just such a plan. They raised a lot of money and assembled a technical team of highly qualified engineers, machinists, and heat pump experts. On a cold day in February, 1976, they tested the system for the first and last time. It was the most efficient solar energy system ever constructed, to my knowledge. Here is what they had. They used a newly developed parabolic reflector system to heat the freon, which is the working fluid in most heat pumps. The vaporized freon was used to power a specially built six cylinder radial engine to produce shaft torque, which was the output of the system. They had 12 solar parabolic panels of 8 sq. ft. each for a system total of 96 square feet of

solar collecting area. On the day they tested the unit, the outside temperature was 20 degrees, but the sun was out. When brought up to full power, their specially built engine was able to deliver approximately 350 horsepower, measured on a dynamometer! That breaks down roughly to about 3-1/2 horsepower per square foot of solar collector, or 2,611 watts per sq. ft! They had demonstrated a practical way of powering a small neighborhood from the roof of a hot tub gazebo. This system was over 20 times better than Tesla had calculated was possible and over 200 times better than the photovoltaic systems commercially available today.

So, what happened to this technical breakthrough? Unbelievable, but true, the fund raisers of the group were siphoning off investment capital to buy land and the FBI had been watching them closely. The technical team couldn't understand why they were being delayed constantly by the fund raisers who could only raise funds during the research and development stage of the project. Finally, in a sneak move to finish, the technical team worked around the clock for days, culminating in the test of the system. The next morning, the FBI raided the installation with warrants charging the fund raisers with fraud. The equipment was confiscated and the technical team dispersed. I got this story from a former member of the technical team.

In spite of the intrigue involved, this solar assisted heat pump system is a proven method of large scale "Free Energy" there for the taking. It could be redeveloped for less than \$250,000.

This brings me to the topic of a different solar assisted heat pump system being advocated by that notorious salesman named Dennis Lee and his company C.O.N.S.E.R.V.E. Financial Services. He has surfaced again, this time operating out of Seattle, Washington, after spending some time in jail in California. He is currently selling an information package for \$59.95 that includes video tapes and printed materials of systems that were developed years ago. He has never delivered an operating free energy system to anyone, but he has raised millions of dollars to do it. His literature looks great and all you have to do is call an 800-number to find out. Well, don't bother. The video tapes show nothing that is scientifically conclusive and the rest is just Dennis Lee ranting about all the injustices he has been subjected to. Having seen this man operate on a large crowd, I believe that most of the "injustices" he has been subjected to were self-induced. He is primarily a "sales type" of personality with only limited technical understanding about the systems he is promoting. I saw him constantly exagger-

he, misstate, or otherwise garble most of the technical discussion involving specific efficiencies or timetables when the equipment would be available. Also, the technical package I bought from him did not contain all of the information he claimed it did. I personally believe that Dennis Lee has hurt the "Free Energy" movement in general and the interest in solar assisted heat pumps in particular. This is best illustrated by the fact that when I called one of the companies that build the "flat plate evaporators" that his system uses and told them that I was involved with Dennis Lee, they hung up! They didn't even want my business. Dennis Lee promotes the use of their product constantly, and they hate it. Either they are doing very well, or it says something about Dennis Lee. I've included this information because I hope to stir up interest in solar assisted heat pumps while helping you steer clear of Dennis Lee and his company C.O.N.S.E.R.V.E. Financial Services.

And if all this controversy is not enough, let's get into all the bru-ha-ha about FREON. As most of you may know, freon is one of those nasty chemicals, CFC's, that is supposedly destroying the OZONE layer in the upper atmosphere. While this may be true, it is not clear why the media continually ignores other potential sources of chlorine and bromine in the upper atmosphere. Confidential sources tell me that the solid rocket boosters used by the NASA Space Shuttle are a chlorine based compound and that each launch laces the upper atmosphere with large amounts of ozone destroying chlorine. To be sure, most of the destruction of the ozone layer has happened during the period of the Space Shuttle flights. While I haven't gotten to the bottom of this, it is interesting to see that just as the best use of freon is being discovered for use in solar assisted heat pumps, it is being rapidly withdrawn from commercial availability. If CFC's are contributors to the destruction of the ozone, their production must stop. In that case, I hope that other compounds can be developed with very low boiling points to replace them so that development of solar assisted heat pumps can continue.

Until that time, we may have to look else

where for efficient heat engine technology. For instance, back in the 1970s, Ford Motor Co. developed a four cylinder Stirling (external combustion) engine that out performed their 350 cubic inch V-8 in every way. It had 4 cylinders with a 200 cubic inch displacement and used hydrogen gas as the working fluid. It had only half as many moving parts and produced 190 hp at 1800 rpm. It got 75 miles per gallon on regular gasoline, but could be adapted to burn any combustible liquid, from kerosene to martinis. Ford even published a book on the test results which I have seen. As you may have already guessed, this excellent heat engine was never mass produced.

So, what is a heat engine? Heat engines are really very simple. The principles for their operation were first published by a French physicist named Nicolas Carnot in 1824. They run on a mechanical energy to heat exchange process known today as the Carnot Cycle. In general, it works like this. Some working fluid is heated and allowed to expand, delivering some useful work. Then the working fluid is cooled, compressed, and delivered back to the heater for re-expansion to start the cycle over. Some of the heat of expansion is "converted" to mechanical work as a useful output because the working fluid requires less work to compress when it is cool than the amount of work it can deliver under pressure when it is hot. This is essentially how the heat pump systems work. Heat engines usually operate with a working fluid that is repeatedly heated and cooled, expanded and compressed in a closed cycle. Heat is simply transferred to and from the working fluid from the outside of the engine. That is why they are sometimes called external combustion engines when run on fossil fuels, because the fuel is burned outside of the engine. But the internal combustion engine that powers your car is also a heat engine, and it operates on most of the same principles. The main difference is that the "working fluid" is a combustible air/fuel mixture that can only be used once and then discarded. This is an example of an open-cycle heat engine.

It is also possible to imagine an open-cycle heat engine that uses the sun as the

source of heat and ordinary air as the working fluid. While the efficiency of such a system will be far below our solar assisted heat pump described before, it will allow us to get away from problem chemicals like CFC's and go "low tech" all at the same time. One example might look like this. A large chamber is created underground to cool incoming air. Air is then drawn from this cooling chamber and compressed 10:1 by a Tesla turbine style pump and delivered to an area that heats the air with solar energy. The hot, compressed air is allowed to reach a certain pressure and then is released through a second Tesla turbine for power production. The power turbine drives the compressor turbine and some other output appliance, like a combination starter motor and output generator. As a stationary power plant, size is not a significant factor, so the unit could be designed to move large volumes of air slowly to reduce losses to friction. This would also allow for efficient cooling and heating of the air. The system is mostly passive, uses air as the working fluid and has only two moving parts, the turbines. The efficiency of such a solar engine might be increased even more by further cooling the incoming air with a fine mist of water before compressing it. This would also help to increase the pressure at the hot end with the greater likelihood of added steam production. A typical 5 hp turbine uses about 40 cubic feet of 100 psi air per minute at 3000 rpm. If the cooling and heating areas had 200 cubic feet of capacity each, the air would have 5 minutes to cool off and another 5 minutes to heat up. The temperature difference between these two areas could easily attain 200 degrees on a sunny day to drive the system. I could go on and on describing this system, but I think you get the general idea.

There are lots of other possibilities for heat engines using solar energy that don't need special compounds like freon. Some are even "low tech" like the example just given. Well, that's enough for now. But, if any of you energy buffs out there have a good idea, let us know. We would be glad to evaluate your project, offer advice, or direct you to others who share your interests. 'Til next time, keep thinkin'.

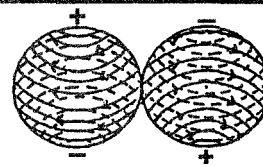


A ROUND PEG IN A SQUARE HOLE

by Larry Spring

225 Redwood Ave., Ft. Bragg CA 95437

LARRY SPRING'S ELECTROMAGNETIC SPHERE



Without recognizing the spherical shape of traveling $1/2$ wavelength diameter units of magnetic energy, scientists and engineers often put a sphere through a square or rectangular wave guide. A round metal pipe with smooth interior bounce surfaces slightly larger than the $1/2$ wavelength worked best in my limited testing if simply transporting magnetic energy was the primary interest. Running an 11 inch sphere through a 14 inch pipe was about the best. The full wavelength of that $1/2$ wavelength spherical size would be 22 inches. The signal in the tube was flat (no highs or lows).

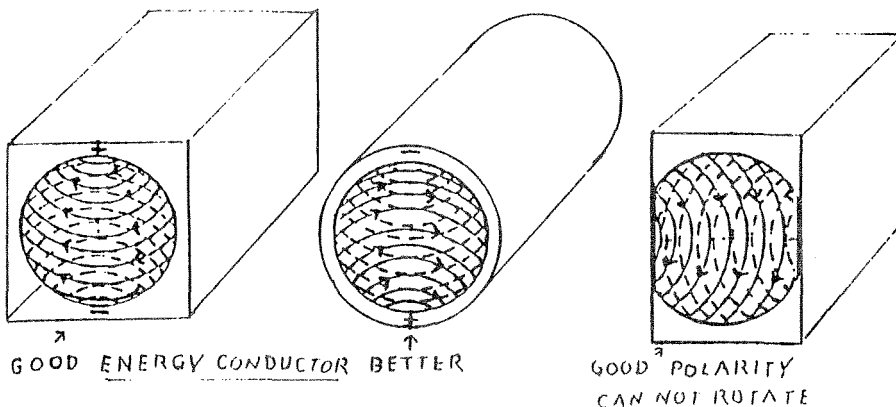
These figures are close, but not designed for precise engineering. Highs and lows appeared in larger diameter tubes.

Reducing the 14 inch pipe to 12 inches, I lost $1/2$ my signal. 65% of the full wavelength may be a good rule of thumb, while 70% may be necessary for a squeezed up rectangular tube.

The magnetic lines of force perpendicular to an imaginary pole running through the center of the magnetic sphere will not tolerate a tight fit in a tube, while the pole ends can be squeezed considerably without any great loss. This squeezing must increase the circumference around the equator of the sphere, as Winston E. Kock, in his booklet *Sound Waves and Light Waves*, says that the energy passing through a wave guide speeds up. Expansion of the spherical unit around the equator I believe would cause a speed up in a narrow rectangular wave guide. This speed should return to normal upon leaving the wave guide, and returning to the shape of a perfect sphere.

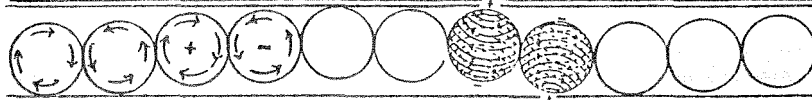
Being narrow, less than the $1/2$ wavelength the narrow way, and ample room to accommodate the expanded equator of the magnetic sphere the long way of the rectangle, the spheres of energy cannot rotate polarity.

CONCLUSION - A round peg will fit in a square hole if you allow enough room.



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MY ELECTROMAGNETIC SPHERES

Larry Spring's theory states that electromagnetic energy propagates in spherical energy units. In this video experiment he proves his theory and simply explains it for the layperson to understand. By placing chicken wire of varying sizes over a TV satellite dish, Larry is able to measure the size of different units of energy and determine their spherical shape. He also demonstrates that movement is important in the generation or use of electric fields and that the solidity of an object determines its reflectivity of signals.

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FIELD GENERATORS

by R. F. Directo

INTRODUCTION

The experimental procedure presented herein is a guideline for drawing negative charges from a grounded source of metal to an attraction field which conducts the flow to an application circuit. The potential of this source is on the order of several thousand volts and the current, from a few milliamps up to one Amp! Depending on your area and grounded source up to 25 watts and more is possible with an optimum configuration. You can use this project to power appliances or charge batteries. Free yourself from the power company! Get Busy!

DISCLAIMER

CAOROP Projects takes no responsibility in any independent workmanship of this project and cannot guarantee satisfactory output from individual geographically random construction of said device.

LEGAL WAIVER

The following experimental project must be kept in a well ventilated area. This device can draw sudden concentrated bolts of energy such as lightning either directly or from ground especially in areas where such atmospheric or man made charges are concentrated. Exposure of this device to any form of nuclear radiation (e.g. X-rays) can also lead to disastrous results. Be forewarned! Please read this entire manual before attempting construction of the Reverse Potential Field Generator. CAOROP Projects takes no responsibility for any form of damage or injury resulting from irresponsible construction or supervision of this experimental device. Acceptance of these plans warrants this on your part.

On this note we wish you success in coming another step closer towards self sufficiency.

(Field Generator = F.G.)

WORK AREA

You must consider the working area for the F.G. It can vary anywhere from approximately 1'x 2'x 3" to 4'x 8'x ? This area should be unenclosed by metal walls, floor, or ceiling, be spacious, as dry as possible, and have access to a dry, grounded metallic structure (e.g. gas pipe) and access to a wet, grounded metallic structure (e.g. cold water pipe) by means of a heavy electrical connection. This space must be well ventilated allowing no

accumulation of "dead air".

As you can imagine this will be a rectangular structure which can be laid flat or on its side, attached to heavy gauge wires at one end and an electrical load at the other.

FIELD GENERATOR: MATERIALS

The Field Generator consists basically of alternating layers of light, organic material and ferromagnetic material (iron sheets are ideal).

The ½" fibrous building board made by Celotex at your local hardware store serves this purpose best. (but if your area is especially humid you may also use ½" styrofoam sheets -- found next to the building board.)

You may find iron sheets at your local metal scrap yard, hobby shop, ironworks, or lab supply. If unobtainable, then use galvanized steel flashing or steel wool. Steel wool tends to be the least expensive of the three, yet almost as effective as iron. Buy the finest (#0000). It will be unrolled, kept fluffy, and applied with no overlapping (except for two layers of more at the centre of the F.G.).

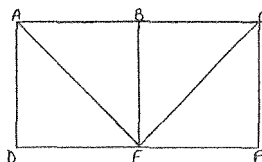
You will also be laying a trace of copper on the (in)organic layers for conduction. Bare or wrapped wires are OK, but a copper plate trace tends to increase the strength of the output. Copper plates can be found at the hobby shop or lab supply in small stock. If you can find copper strip in rolls, 1' wide or more, then please use it!

Heavy gauge wires (i.e. batter cable size) will be connected to the F.G. from the wet and dry grounds. The copper trace will conduct from these wires to the application circuit through the F.G.

FIELD GENERATOR: DIMENSIONS

CAOROP researchers have found that cutting the F.G. to certain dimensions rather than at random will tend to increase field strength thus power output:

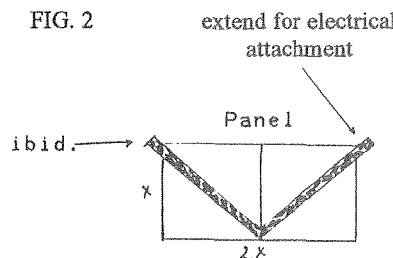
FIG 1 AB=AD=BC=370MM (14.58")
AE=524MM (20.62")
(AEC is copper trace)



You may change the size of the arrangement proportionally to the dimensions given. Increasing the size will increase the influence and current strength. The copper trace along AEC can be a copper strip as small as 1" wide, planted along these diagonals, will gain maximum influence from the F.G.

FIELD GENERATOR: CONSTRUCTION

After cutting the panels to proper size you will attach the copper strip along the diagonals:



Doing this for more than the two centre panel is not recommended in areas close to power stations or subject to low discharges of atmospheric energy. If working with copper plates, you may overlap to achieve conduction.

Spray-on adhesive is OK, but the panel glue found in hardware stores is more dependable and less expensive. (A little goes a long way, so don't make a mess!) Panel glue can serve all the adhesive attachments in this project.

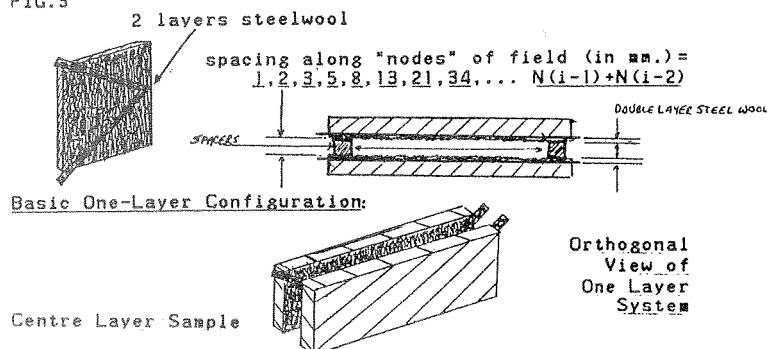
Although iron sheets give the best results in this system you may find them too cumbersome to deal with or difficult to locate. If not, adhere the iron in only one sheet layer per panel with panel glue.

Apply steel wool (#0000) rolled out straight and uniform (no overlapping) with glue or/and long steel staples. Do not compress the steel wool -- the exposed surface of steel wool helps to increase field strength. You may also apply one layer of galvanized sheet steel before the steel wool, not after, to leave the wool fluffy. The copper trace must not touch the ferromagnetic material, so you may use a thin insulative material like plastic food wrap.

The attraction field produced is wavy, but predicable. The asymptotic nodes of energy occur at $N(i) = N(i-1) + N(i-2)$ as peaks of energy. This is simply the Fibonacci series where any number in the series equals the addition of the two numbers preceding it. Do the spacing in millimetres.

The spacing between the panels is made with something small, light, and non-conductive at each corner such as pine or building

FIG. 3

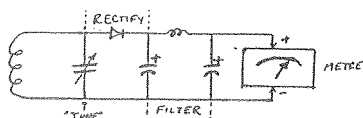


board scraps. The closest spacing will not necessarily yield the greatest field strength.

HOOK UP & TEST CIRCUIT

The electrical components for the test circuit must be able to handle at least 5,000 volts. Your local electronics surplus may carry these items inexpensively, but they are few in number:

FIG. 4



The tuning capacitor is a high voltage, air-plate capacitor of one farad or greater or greater. It will be used for "tuning-in" the optimum charge frequency from your particular ground structure. You can put an electrolytic capacitor with matched value in its place. The diode is a zener and the inductor should be at least 5 henrys. The componentry should all be high power to handle at least 2 watts.

You may, of course, use lower power components if high power is not your objective (i.e. in the case of charging batteries).

The F.G. will need a choke coil at the dry ground. You must use a large coil here which is a heavy gauge wire wrapped 17 times or more around a ferromagnetic donut of at least 5" in diameter. (Fig. 5)

The attached inductors will represent an inductive influence. In the case that the current is not strong enough to motivate satisfactorily, induction switches may be used for a direct link-up. (Fig. 6)

An inductive circuit is much safer from electrical hazard than a direct connection which

should only be used if even the best field generator you make does not produce a promising output. The inductive connection can be a double antenna coil or a 1:1 transformer. Upon tuning in the best value you can replace the tuning capacitor with an electrolytic or two in series to increase voltage. (Fig. 7)

Either circuit is good for battery charging, but for not you may want to increase the field strength.

MULTIPLE LAYERED FIELD GENERATOR

Multiple layers tend to increase field strength, thus power. Copper traces can be added to the other panels in a ratio according to the Fibonacci series for an optimum effect. Let us assume a five layer generator. (Fig. 8)

Only one trace for the upper and lower set of panels is required, but the above type of configuration allows the aforementioned minimal dimensions to achieve the same field strength as a single layer "draw" which is four times larger. (i.e. a 370mm x 740mm x 5 layer F.G. vs. a 1480mm x 2960mm x 1 layer F.G.)

When using multiple traces always install the lesser number in the panels leading to

wet ground. Increase the number of layers in the F.G. according to the Fibonacci series of optimal field strength (i.e. 1,2,3,5,8,...etc.), so you can also plant the traces for the same effect (e.g. 5 Layers: 5 Cu traces to (-), 3 Cu traces to (+); 8 layers: 8 Cu traces to (-), 5 Cu traces to (+); etc.)

Remember that field strength can also be increased by increasing the size of the panels in a one layer arrangement.

F.G. IN A HUMID ENVIRONMENT

A humid atmosphere will dissipate the field effect and must be countered by using materials that build a "static" charge on their own. Styrofoam can be found as 1/2" thick sheets at the hardware store. Applied to a one layer system the foam should be the panel leading to wet ground (+) while keeping the organic panel leading to dry ground (-). (Fig. 9)

Panel glue should be used to adhere the ferromagnetic substance to the foam. Most other adhesives could melt the foam. Wooden dowels can be used as spacers, but use pine or any other light wood.

In a multi-layered F.G. the foam and the organic board will be alternated. You can still use 1/4" steel washers or the equivalent to space the panels (you may also use rubber washers). (Fig. 10)

In a multi-layered F.G. the organic panels must always face outside. They should also be coated with a water repellent before assembly. The F. G. can also be protected from moisture by coating it with plastic food wrap such as Gladwrap or Saranwrap. These polypropylene sheets also help to accumulate "static".

THE VACUUM EFFECT

A high vacuum also tends to accumulate the same energy as the panel accumulators described above. (For trivia buffs, an experiment had a simple vacuum in a glass tube with

FIG. 5

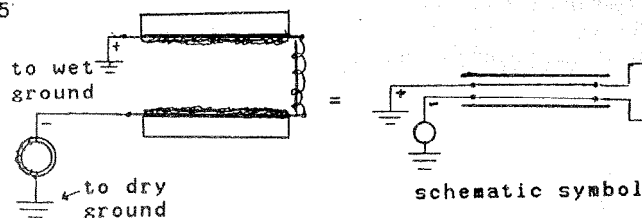


FIG. 6

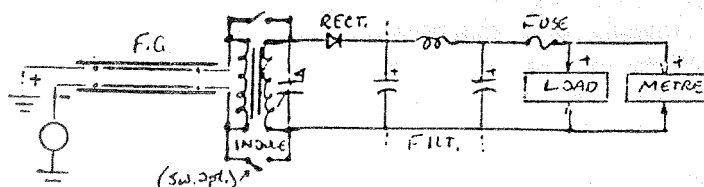
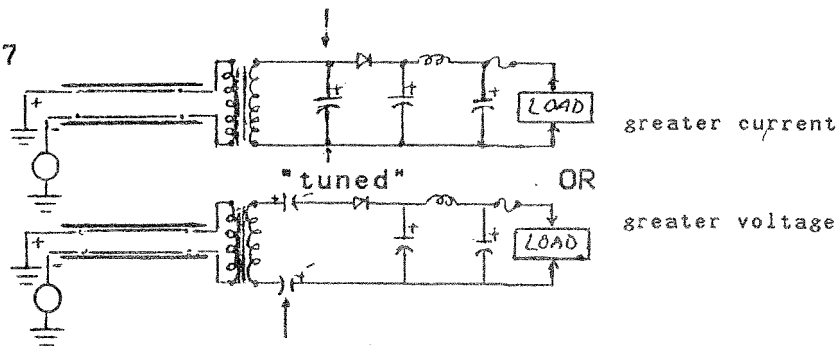


FIG. 7



a high voltage filament. The space within was found to glow blue in colour.)

If you have ever done the plasma-globe project as found in Radio-Electronics, then you already have the necessary tools. If not, I refer you to the January '89 issue at your public library. The basic configuration is seen in figure 11.

The field strength is proportional to the vacuum and is also improved with an increase in the number of electrodes. Putting both positive and negative leads in the same vacuum is like creating a short, so there must be a separate tube for each set.

Multiple electrodes are spaced to act as spark gaps.

Spacing the spark gap in each successive electrode according to the Fibonacci series, in millimetres - again - has a positive effect.

Fig. 12

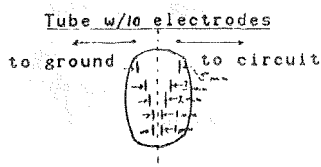
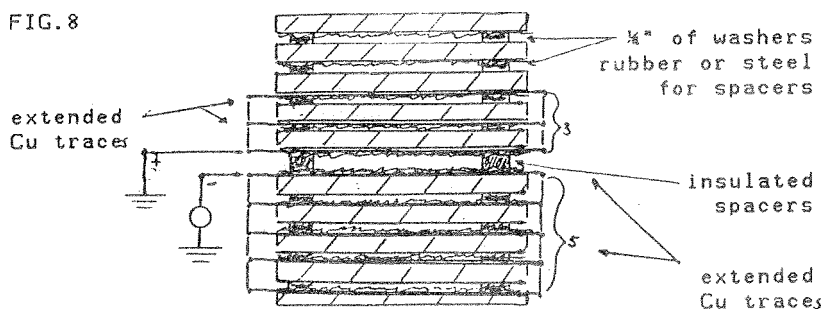


FIG. 8



$$N(1) = 1, 2, 3, 5, 8, \dots$$

CAOROP researchers have yielded up to 3 watts with the ten electrode-vacuum tube approach. But it may also be very difficult for personal construction. The tubes also take several weeks to accumulate enough charge

FIG. 9

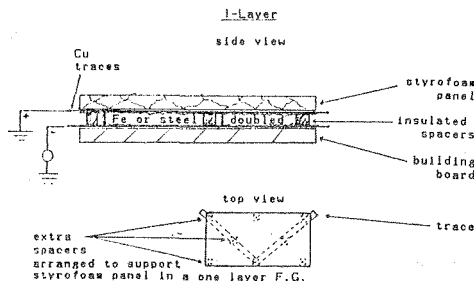
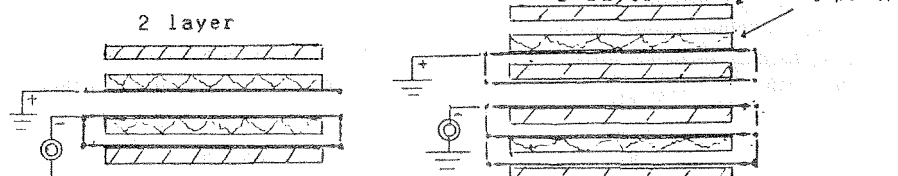


FIG. 10



on their own.

If you want to shorten the accumulation time, you can put the tube in a F.G. box (six walls instead of the two already demonstrated)

See figure 13.

Charging the tube a F.G. box of three layers or more shortens the accumulation time to one week and less. The most difficult project you might undertake is placing the panel F.G. within a vacuum. This has been done. By surrounding the F.G. with 1/4" or thicker plastic sheets then epoxy welding them at the seams you can form an enclosure. (Fig. 14)

You will have to add extra spacers to support the panels from collapse during vacuum. Less than one inch of Hg can be pulled before a "short" is created. (This is OK since only a certain amount of vacuum can be pulled before this type of system breaks down and springs a leak.)

The layered F.G. in a vacuum has been found to be almost double in strength compared to a regular field from an accumulator a regular atm. pressure (almost 50% gain in power.)

MISCELLANEOUS CONFIGURATIONS

Ultimately, your own F.G. will vary between a tall, compact stack or a thin, long pair of panels. A field generator will work in any position (i.e. as long as it holds together!) Any wood or plastic brace will do the job -- NO METAL. Any high tensile tape will also work -- EXCEPT METAL. REMEMBER, NO METAL SHOULD ENCLOSE THE F.G. This would tend to nullify the field.

In order to save space you may choose to disguise your F.G. as a piece of furniture or some other part of your living arrangement. (There is no danger of surge hazard with the grounds hooked in safely and securely.) (Fig. 15, 16)

There are many ways to conceal heavy gauge wires as the people in the electrical dept. of your local hardware store can show you. Only the matter of your application

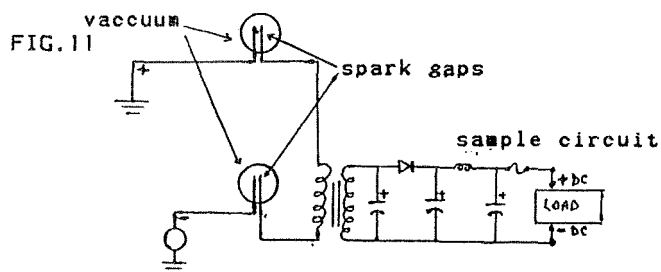


FIG. 13

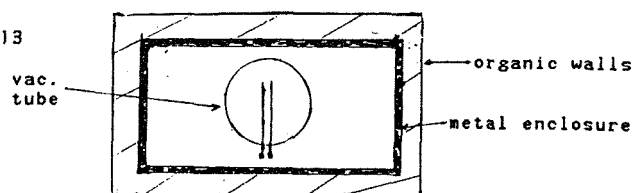
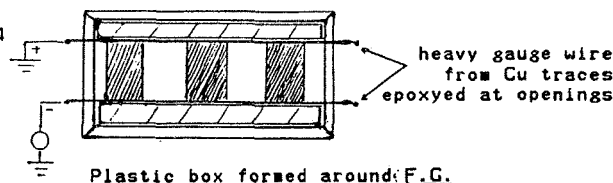


FIG. 14



circuit is left to conceal. You may even have several F.G.'s leading to one power circuit, but each system must have its own inductive connection.

APPLYING ANOTHER ENERGY FIELD

After some experimenting you may find that the output is greater the closer you are to the device, either layered or vacuum tubed. Other living bodies such as small animals and plants also affect field strength in the same way when brought closer to the F.G.

A voltage regulator can control any over-voltage, but this phenomenon can also be a blessing. A voltage controlled switch in the circuit can turn on lights when you enter a room with (a) properly located field

generator(s) or operate other items.

APPLICATION CIRCUITS

Parts, kits, and more should be found at your local electronic hobby shop or surplus for basic control circuits such as voltage controlled regulator and inverters. The following schematics are only a guideline. For concise information on dealing with high voltage, low current power sources look in your public library or electronics hobby store. Only inductive circuits are recommended unless the output is poor in your area.

REVISIONS

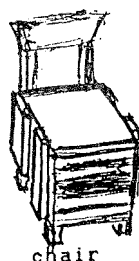
1. There must be NO electrical short between wet ground(+) and dry ground(-) or the system

will not work. (e. g. your water heater may have an existing short between gas and water pipes, mainly the heater jacket itself! This can be rectified with a plastic adapter at the gas main.)

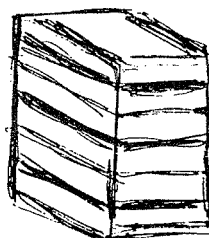
2. An iron pipe leading to moving water is the ideal wet ground. (e. g. commercial water well systems use iron pipes which lead to constantly moving aquifers.)

3. If iron pipe leading to a source of moving water is not feasible in your case, try the hot water outlet at your water heater which tends to perform a little better at "sucking" negative charge. (Better than the cold water inlet.)

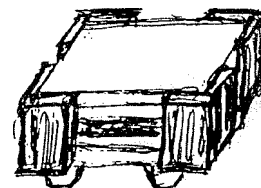
4. Try the hook-up without a F. G.!



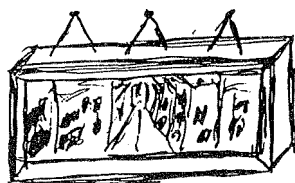
chair



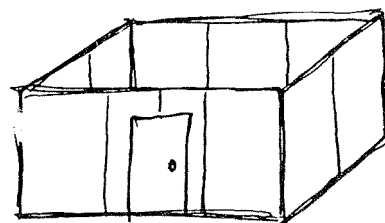
decorative pillar
(more than one stack)



coffee table
or imitation
plant stand
(no H2O)

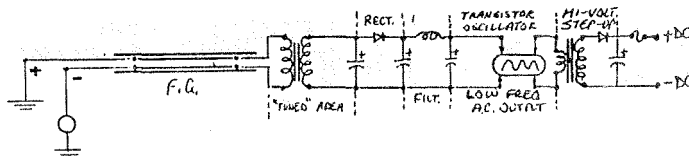


MURAL
(Bldg. board has a porous white side-perfect for oil or watercolour painting!)

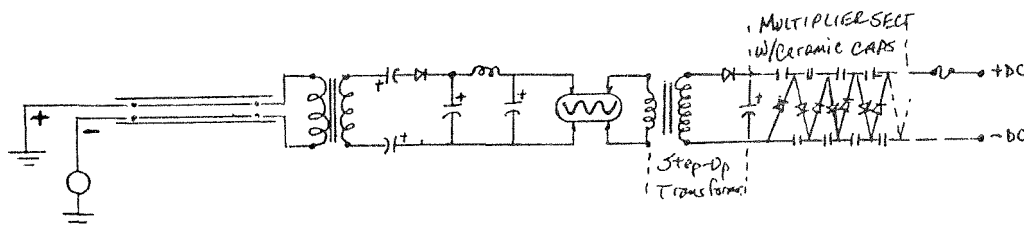
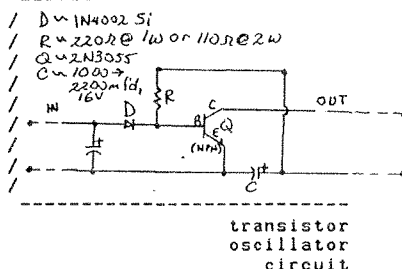


WALLS FOR ROOMS
(The original purpose for the bldg. board-now vastly improved)

FIGURES 15 & 16



For short pulses of High Energy D.C.



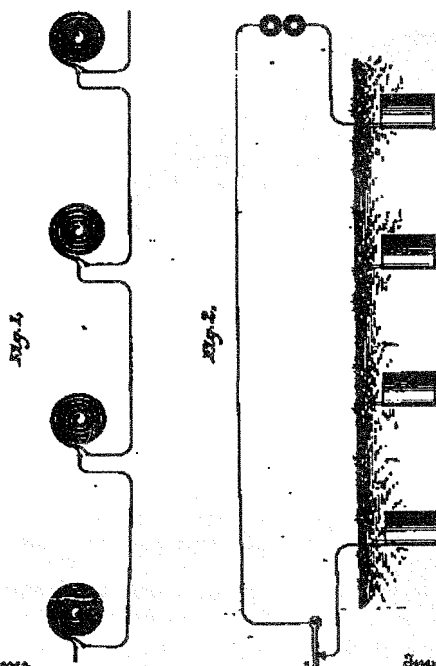
For High Power Applications

(No Model.)

G. F. DIECKMANN.
ELECTRIC EARTH BATTERY.

No. 329,724.

Patented Nov. 3, 1885.



Witnesses
Geo. H. Break
118
James J. J. J.

Inventor
Geo. F. Dieckmann
By J. H. J. J.

More Earth Energies!

Here is another design of an earth energy generating device patented by G. F. Dieckmann in 1885. (This and several other 19th century earth battery patents were graciously submitted to us by BSRF Associate Gerry Vassilatos). In this layout, two sheets of metals (one copper and one zinc) are rolled up into a spiral with an insulating material of felt or other suitable non-conducting material between them. The negative plate of each couple is then connected to the positive plate of the next thru the series, and then placed in the earth with a fairly large distance between each couple. The distance they are to be set apart is dependant upon the resistance of the working circuit. Also shown is the device's use in a telegraphic circuit.

This design has some unique qualities not found in other earth battery systems. The first, of course, is its spiral configuration. This has been adopted by some researchers in the construction of orgone accumulators to great effect and it is well known that the properties of the spiral are conducive to the reception of the vital energies (remember Nikola Tesla's affinity for flat spiral coils as evidenced in so many of his patents).

So it is with this patent that we may see miraculous combinatory intuitions later found in the works of Reich (layering of reflective and non-reflective materials), the spiraling coils of Tesla, and the ages-old idea of drawing upon the telluric potencies of Mother Earth. The forces at work in this design (note the radionic pattern) and in the Field Generator are seemingly more complex than the typically retarded actions of galvanic batteries which manifest their energy from the chemical reactions of dissimilar metals immersed in toxic solutions. Alas, the beauty lies in their unabashed simplicity and we know it is simplicity which will nearly always deliver us closer to the truth.

MBT

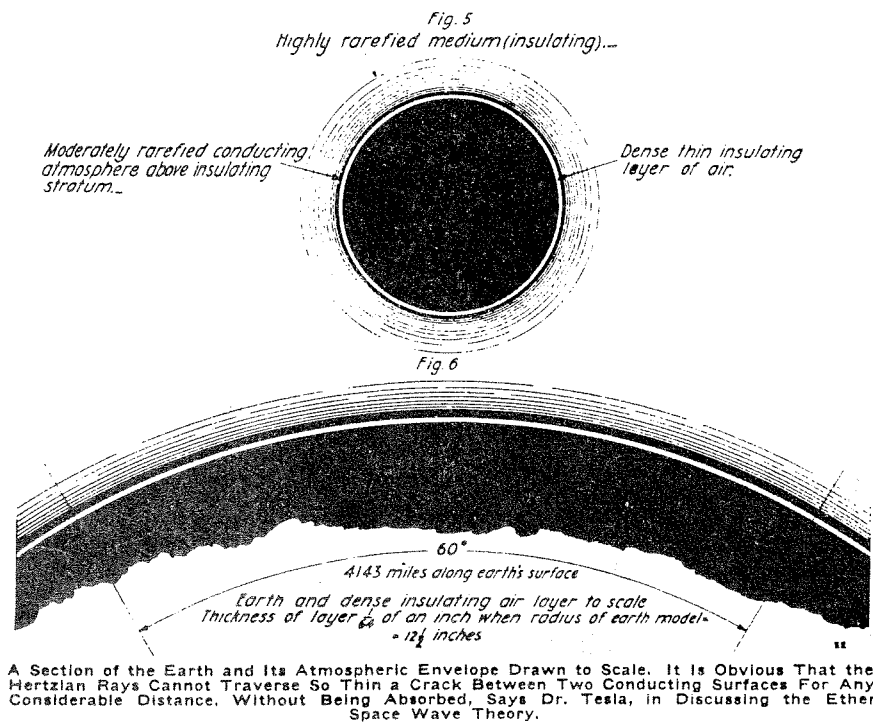
SCIENCE FICTION REVIEWED

BY MICHAEL THEROUX

"Do wireless signals fly through space by means of so-called Hertzian waves in the ether, or are they propagated thru the earth at prodigious velocity by means of earth-bound oscillations?...Tesla maintains that wireless communication is accomplished ONLY thru the medium of the earth itself. His contention seems very sound. If it were not so, let every wireless station, commercial or otherwise, do away with its ground connection. None could then operate as is well known, except perhaps over very limited distances."

This quotation comes directly from the editors of the Electrical Experimenter, Feb. 1919 at the heading of an article by Nikola Tesla entitled *Famous Scientific Illusions*. We ran this article in its entirety in the Jan/Feb 1988 Journal of Borderland Research. So why am I bringing it up again? My rationale is quite just. Actually, I am thoroughly dismayed at the complete nonsense that is being passed off as scientific fact concerning Tesla and his experiments. What I am referring to in particular is an article that was featured in the October 1991 issue of The Journal of Wireless Power Transmission (from TESLA, Inc., 820 Bridger Circle, Craig, CO 81625), and the January 28, 1992 edition of the Electric Spacecraft Journal (from Electric Spacecraft Inc., P.O. Box 18387, Asheville, NC 28814). The article, called *The Power Wave* by Ron Kovac, is one of the most erroneous pieces of creative writing I have ever come across. It is pure science fiction. Now, I am not knocking these two well-done publications for running the article, but I feel it necessary to set the record straight once and for all. First, let us review some of the incredible fallacies and fantasies presented in this bogus composition by Mr Kovac. He starts by giving an explanation of the well

known but misunderstood Schumann Cavity. He simply says that the powerful waves created in 1899 by Nikola Tesla's device in Colorado Springs, once generated, "would encircle the earth... and that this power is currently viewed as accumulated in the resonant cavity between the ionosphere and ground." It may be that Mr Kovac has never seen the article *Famous Scientific Illusions* by Nikola Tesla but even if he had read further than the first few pages of *Colorado Springs Notes*, he certainly wouldn't have needed to publish this prevarication. In order to clarify Mr Tesla's true intentions, here are some



excerpts from Part III of *Famous Scientific Illusions* by Nikola Tesla, entitled *The Singular Misconception of the Wireless*:

In the course of development of my induction motors it became desirable to operate them at high speeds and for this purpose I constructed alternators of relatively high frequencies. The striking behavior of the currents soon captivated my attention and in 1899 I started a systematic investigation of their properties and the possibilities of practical application. The first gratifying result of my efforts in this direction was the transmission of electrical energy thru one wire without return,

of which I gave demonstrations in my lecture and addresses before several scientific bodies here and abroad in 1891 and 1892. During that period, while working with my oscillation transformers and dynamos of frequencies up to 200,000 cycles per second, the idea gradually took hold of me that the earth might be used in place of the wire, thus dispensing with artificial conductors altogether. The immensity of the globe seemed an insurmountable obstacle but after a prolonged study of the subject I became satisfied that the undertaking was rational, and in my lectures before the Franklin Institute and National Electric Light Association early in 1893 I gave the outline of the system I had conceived.

In the summer of 1897 Lord Kelvin happened to pass thru New York and honored me by a visit to my laboratory where I entertained him with demonstrations in support of my wireless theory. Suddenly he remarked with evident astonishment: "Then you are not making use of Hertz waves?" "Certainly not," I replied, "These are radiations. No energy could be economically transmitted to a distance by any such agency. In my system, the process is a true conduction which, theoretically, can be effected at the greatest distance without appreciable loss."

The theory has been seriously advanced that these radiations (Hertzian) pass around the globe by successive reflections, but to show the absurdity of this suggestion, reference is made to figure 7 in which the process is diagrammatically indicated.

However incredible, it is true that the minds of some of the ablest experts have been from the beginning, and still are, obsessed by this monstrous idea, [the Hertz system] and so it comes that the true wireless art, to which I laid the foundation in 1893, has been retarded in its development for twenty years.

These men labor under the impression that energy flows in all directions and that, therefore, only a minute amount can be recovered in any individual receiver. But this is far from being so. The power is conveyed in only one direction, from the transmitter to the receiver, and none of it is lost elsewhere.

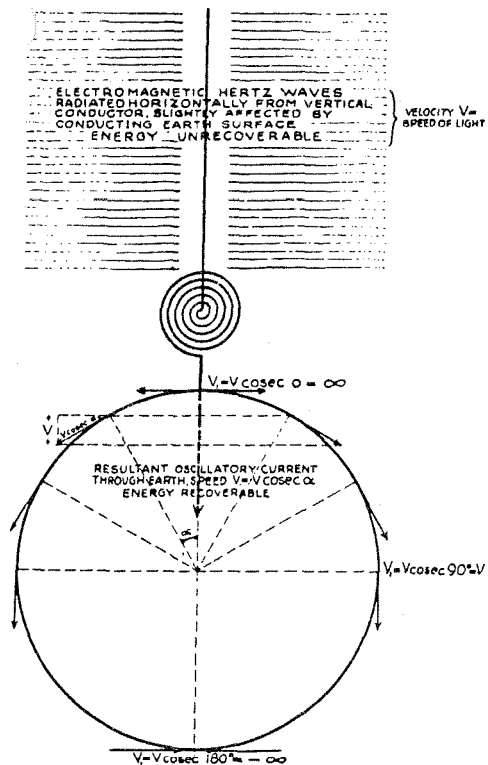


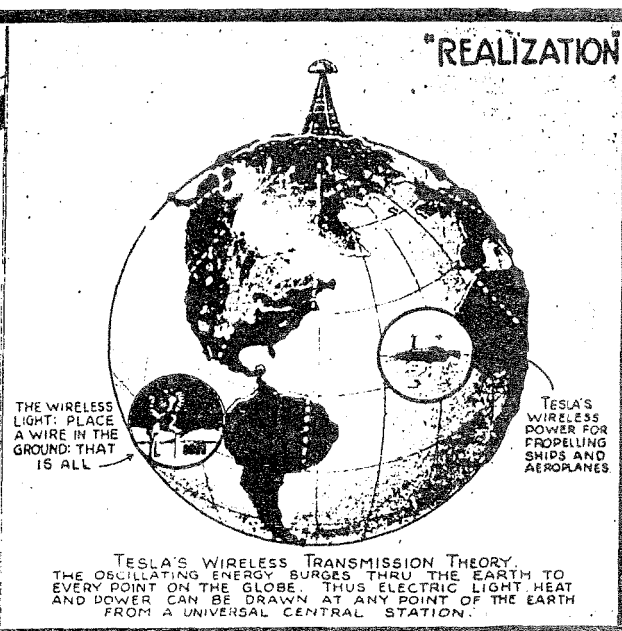
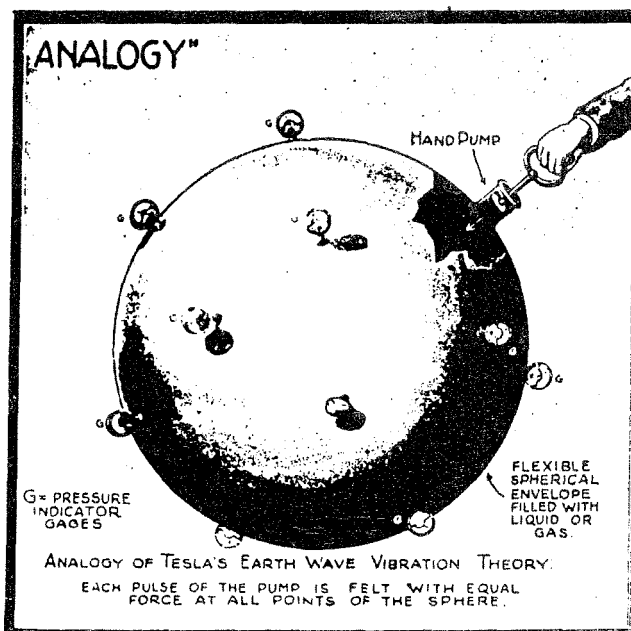
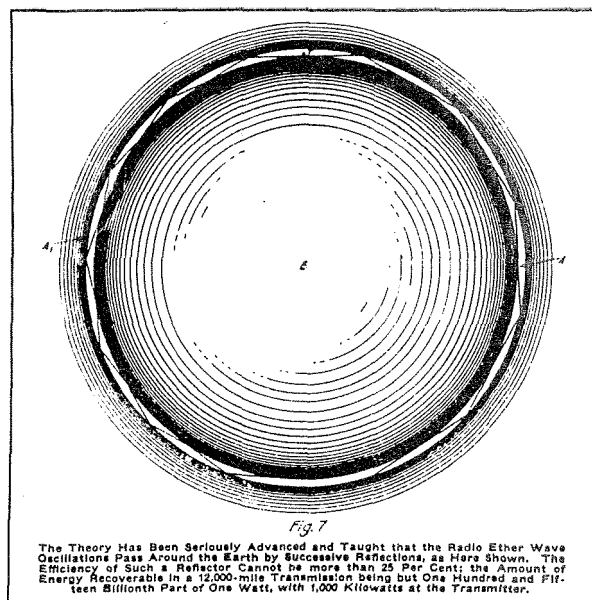
Fig. 9. THEORY.

It is apparently obvious that the system of radio wave propagation in use today is undeniably Hertzian and has nothing to do with Tesla's intentions. Also, Tesla's own words

and diagrams completely invalidate anything already said by Mr Kovac, but let us continue for our own amusement. One of the more ridiculous statements made in *The Power Wave* article is this: "Tesla also had a mercury rectifier inside his antenna." Has anyone ever seen any reference to Tesla using gas filled devices in his antennas? It would seem that Mr Kovac's apparent obsession with the early part of Tesla's *Colorado Springs Notes* has completely separated him from the realities of what Tesla was actually doing. He continues, as would anyone immersed in the orthodox dogma of Hertzian propagation, to mislabel Tesla's capacity terminal as an antenna. Included in the article is a diagram from Tesla's *Colorado Springs Notes* in which Tesla's own text reads, "Structure for capacity of extra coil, for investigation of earth vibrations chiefly." (see diagram on following page) Mr Kovac now foolishly reasons that Tesla coated and wrapped the joints of his 'antenna' for the purposes of sealing in certain inert gases. It should be blatantly obvious

from the aforementioned diagram that the joints of the pipes, etc. on Tesla's capacity terminal were smoothed over (again in Tesla's own words), "so as to have no conducting points sticking out." Tesla's elevated capacity was used for the tuning of the extra coil in his magnifying transmitter system; not as an antenna and therefore any discharges would have been detrimental to the efficiency of the system.

It really isn't necessary to continue picking at this piece of comedy. It should be indisputable that what Tesla was really doing



Tesla's World-Wide Wireless Transmission of Electrical Signals, As Well As Light and Power, Is Here Illustrated in Theory, Analogy and Realization. Tesla's Experiments With 100 Foot Discharges At Potentials of Millions of Volts Have Demonstrated That the Hertz Waves Are Infinitesimal In Effect and Unrecoverable; the Recoverable Ground Waves of Tesla Fly "Thru the Earth". Radio Engineers Are Gradually Beginning to See the Light and That the Laws of Propagation Laid Down by Tesla Over a Quarter of a Century Ago Form the Real and True Basis of All Wireless Transmission To-Day.

has nothing what so ever to do with the absurd notions presented in Ron Kovac's article. And, his is not the only article that I have come across with the author claiming insights into Tesla's secrets. Most adhere to the same misconceptions, and are too numerous to mention.

Initially, I was drawn to these concepts about Tesla's wireless from the researches of Eric Dollard, and my verifying mind led me back to the original sources which were, need I say, in complete agreement. Mr. Dollard's work has included the successful re-creation of a number of Tesla's experiments, many of which have been captured on video. He is also the author of five books related to the subject.

George Trinkaus, in his book *Tesla -- The Lost Inventions* (High Voltage Press, Portland, Oregon) devotes two chapters to Tesla's magnifying transmitter, undeniably confirming the ground system.

We may conclude: There are no concealed mysteries to decipher in Tesla's work. JUST READ WHAT HE SAID.

VIDEOS

TESLA'S LONGITUDINAL ELECTRICITY — A laboratory demonstration video with Eric P. Dollard & Peter Lindemann. #V0005, 60 min, VHS.....\$19.95

TRANSVERSE & LONGITUDINAL ELECTRIC WAVES — A laboratory demonstration video with Eric P. Dollard. #V0004, 50 min, VHS.....\$19.95

BOOKS

SYMBOLIC REPRESENTATION OF THE GENERALIZED ELECTRIC WAVE
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Colorado Springs

Oct. 17, 1899

Structure for capacity of extra coil, for investigation of earth vibrations chiefly.

This structure was erected on a pole 10" x 10" square, tapering on top. Dry fir was used because of toughness and also resinous quality. Pipes of steel of diameters 7", 6", 5", 4", 3 1/2", 3", and 2 1/2" were used. They were shoved one into the other and riveted, four rivets were used on each joint, the lap being 2'.

The lengths of pipes were as follows:

7"	diam.	23' 4"
6"	"	18' 2"
5"	"	18' 4 1/2"
4"	"	15' 7 1/4"
3 1/2"	"	19' 3 1/4"
3"	"	18' 4 3/4"
2 1/2"	"	8' 1/4"

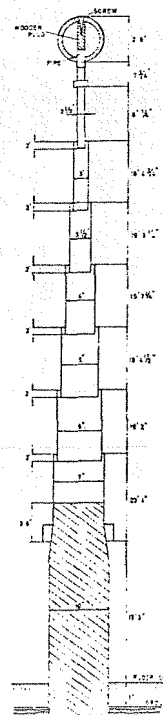
Nipples on top	7 3/4"
Total length of pipes	121' 9 3/4"

Firwood pole	19' 3"
Total from floor	141' 3/4"

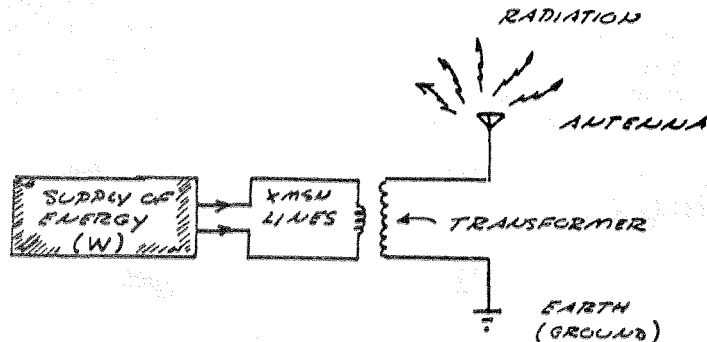
to ground	1'
Total height from ground to bottom of ball	142' 3/4"

On the top was supported a ball of 30" diam. hollow wood covered with tin foil very smoothly and the joints indented so as to have no conducting points sticking out. The joints of the pipes, heads of rivets, etc. were all covered first with sheet rubber pure and then with tape, the latter being finally fastened with strong cord. The ball was shellaced several times and finally covered with weatherproof rubber paint. The pole all along was also painted with the same paint. On the lowest end of 7" pipe a cap was screwed clearing the wood so as to make it more difficult for the streamers to get to the ground along the pole.

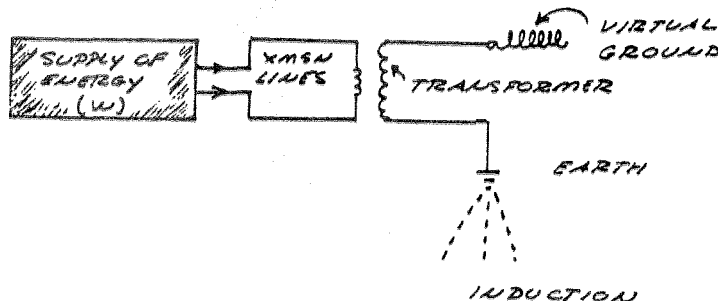
* To prevent lateral play 8 champagne bottles set in beams were used.



From Tesla's Colorado Springs Notes

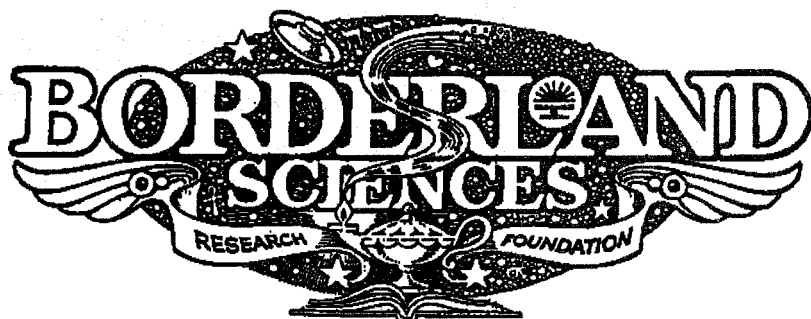


CONVENTIONAL RADIO SYSTEM



TESLA WIRELESS SYSTEM

From Eric Dollard's Theory of Wireless Power



BULLETIN BOARD

BRUSHLESS SOLAR MOTORS

Mr. Spring's article "Mendocino Brushless Motor" appearing in the March/April Journal raises a rather basic question. Is the Journal devoted to "borderline" science or to known technology easily explainable using recognized technology?

The idea of replacing the commutator employed to convey a current to the armature coils in an electric motor employing a permanent magnet stator hardly novel. I personally encountered a Western Electric patent on this

type of structure 4 or 5 times in my practice prior to my retirement.

Unfortunately I cannot easily locate a copy of this patent in my personal files. As I recall it was issued in the 1940s or the early 1950s. I used it as a basis for an exercise in drafting patent claims in bar review courses I taught for would be patent attorneys and agents in the 1960s. Enclosed is a copy of the sketch based on this patent which I gave to the students.

Obviously if these persons in the 1960s could write claims and in fact did write claims to this type of motor with no further explanation than this sketch it is clear that the "action" achieved in his type of solar motor does not involve "borderland" technology.

Isn't the intent of the Journal to deal with the latter instead of spending time on items which, although interesting and perhaps novel to some are easily within the realm of recognized science?

Ed O'Brian
Huntington Beach, CA

Thanks for the info, Ed. We are, of course, dedicated to promoting the realm of "Borderland" science which is why we run Larry Spring's ar-

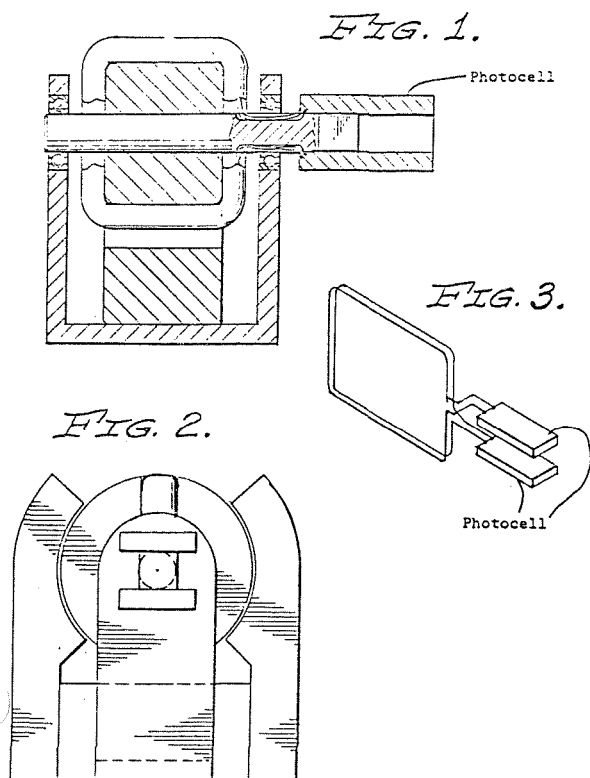
ticles. His experiments into the size and shape of electromagnetic energy propagation are a quite interesting probe beyond our current understandings, and are certainly a piece of the puzzle we are all trying to figure. We ran the Brushless Motor article on Larry's request as he didn't know if it was patented yet and wanted to make sure it was in the public domain.

While being on the subject of our direction I would like to add that much of what has been going into the Journal lately comes from a more mechanistic viewpoint than is usually propagated in the pages here. Articles on the ether are oriented toward physical measurement of a physical (or semi-physical) substratum. We provide a rare outlet for these ether researchers, but our own orientation is towards the qualitative ethers, as indicated in Rudolf Steiner's work. Sometimes it seems as though we spend so much time putting everyone else's ideas together that we have scant time for our own. But we have a commitment to provide a forum for members so you can view the Journal as the current barometer of what is flowing through our offices. We certainly appreciate thoughtful criticism, both positive and negative, as that is one way we all learn.

COLLOIDAL CHEMISTRY

Your Journal is getting better and better each time, keep up the good work. Do you have any input on obtaining "old books" on the subject of Colloidal Chemistry? You know that this important subject is not offered any more at

LIGHT ENERGIZED MOTOR



CORRECTIONS

In the March/April 1992 JBR received section we listed the comic book *Infinous Space* as written and published by Drew Pearson. The author's name is in fact Drew Martin.

werD ekatsim diputs ruo rof yrr0S

Also, in the book commentary by Jeane Manning on Betty Zorotovich's *The Origin of Cells*, the address of the Williams Book Store should be corrected to 443 W. 6th St., San Pedro, CA 90731 ph.# (310) 832-3631.

the scholastic level.
Wm. G. Reimer
Ontario, Oregon

Thanks for the gracious compliment. Check out the inter-library loan network thru your local public library as they should be able to obtain several titles on the subject of colloidal chemistry. Any further info we receive from BSRF Members we'll put in this column. If anyone has any old books on the subject perhaps we could reprint limited numbers for researchers.

THANKS

Just a note to congratulate you on the wonderful job you are doing. I have seen tremendous growth in BSRF since you came on board. I am especially grateful for the variety of research information BSRF offers...I can remember about nine years ago I read a publication of yours on Dr. Koch that started me on an avenue of research into oxygen therapy that has led a fantastic aid to health for my family and friends.
Michael North
Palm Beach, Florida

MODIFIED DROWN RATES

In your book Radionics, The New Age Science I noticed that the instructions given by Dr. Leonard Chapman interviewed by Riley Hansard Crabb were incomplete. For instance, on page 28 and on page 49 the liver rate is given as 481-82-W-38. On page 19 is a diagram of the Modified Drown Circuit. The first number 481 is obtained by using rotary switches #1,2,3 making a total sum of 481 ohms. The next number 82 is obtained by variable resistor #4. Next the W (white) is obtained by the color dial. What switches does a person use to obtain the last number 38, since rotary switch #7 is 100 ohms and rotary switch #8 is 10 ohms, or is it that a person uses #5 or #6 switches. If such is obtained by the #7 switches, then what is the purpose of the #5 rotary switches and vice versa, as I can see no use for them in all of the rates given from pages 37-56. How do I obtain the

last number 38 or the last number for all of the rates for that matter.
Leonard Annunziato
Waterbury, CT

I figure the answer must be simple, the way it is discussed in the book, and I will tell you what I think the answer is:

The rate 481-82-W-38 would be dial #1 - 4, #2 - 8, #3 - 1, #4 - 82, Color dial - W, dial #5 - 3, #6 - 8. The color dial must need to be figured after the first four dials when finding a rate. It is probably kept in that position in the rate chart for consistency. There are some rates that do not have a color setting, for example the third and fourth rate for Malaria. The third 478-23-61-23 would dial in as #1 - 4, #2 - 7, #3 - 8, #4 - 23, #5 - 6, #6 - 1, #7 - 2, #8 - 3. The fourth Malaria rate, 478-23-6-69, poses the question of whether the 6-69 goes on #s 5,6,&7 or on #s 5,7&8. If the second choice is the case then 5&6 and 7&8 may need to be reversed, that is, in the original rate above the 38 would go on dials 7&8 and 5&6 would be left at zero when a color is used. I seriously doubt that is the case, because the general rule in dialing up rates using the regular Drown rates is that the numbers start at the top and move forward without a break in the dials, unless indicated by a 0 as part of the rate. So the 6-69 would be #5 - 6, #6 - 6, #7 - 9, #8 - 0. Usually ohmage of the resistors is not directly related to the rate, other than as a geometric relationship, that is a rate could not really be given as ohms of resistance, except if the resistors are set up to read the same as the dial settings for the rates. The resistors, and/or other components in the instrument are set up in certain patterns or structures that sense, like an antenna/tuner that picks up on the form energy of objects, live or dead.

I do hope that this answers your question. I've put this here in the Journal to ask for help from any readers that may be familiar with this subject. I'll also put this clarification in the Radionics book.

FULL SPECTRUM

The March-April Journal is full of good stuff as usual. Fizix Korner was particularly interesting this month. I suppose many of your readers went along

with Ott when he claimed to produce full spectrum light. Articles like this, which tell the truth about the situation, are really helpful. With regard to Hoxsey, the U.S.A. sadly does not have a monopoly of persecuting benefactors of humanity. France is also in the game via the "Conseil de l'Ordre des Medecins" (the equivalent of the A.M.A.). When I was living in Bourgl-la-Reine, just outside Paris, a Greek doctor (Solomides) found a cheap, effective way of killing cancer. He was hounded by the Medical Association and even after his death I heard on TV that his laboratories had been shut down in spite of witnesses coming forward and speaking on television saying how their lives had been saved by Dr Solomides's oxygen compounds. The medics managed to persuade the police that the compounds were "toxic" as if chemotherapy doesn't use toxic compounds. Still, they had to get rid of a competitor who was taking their foul trade away.

Another thing in the Journal attracted my attention. Your intention to produce a heat device using permanent magnets. Since you intend to sell this device, once it is produced, do not neglect the European market. Americans always tend to forget that Europe exists. They could afford to do so when Europe was a group of independent countries, each with its own trade barriers. That has mostly gone and will completely disappear in 1993 with the Single European Market, comprising about 300,000,000 clients. That's a lot of people so make your heater to work, not only on 110V but also on 230-240V. If you don't it will not sell in Europe and you will lose a hefty market.

Yours very cordially,
Ron Crossley
Poille, France

We were as interested as anyone to hear of Peter's insights into full spectrum lighting. I think that John Ott is one of the great scientists of our age, his work on the effect of light on living systems is well documented and very progressive, but Peter brings up an important point that was obviously missed. Also, sorry to hear of

our Conseil de l'Ordre des Medecins, as they sound like a trade organization protecting their interests, which in this case is the care of the sick. Health be damned, profits count!

Should Peter get any of his ideas off the lab bench and into the economic mainstream we will certainly consider the entire world as a market. Peter is keenly aware of the status of the world and the impact of technology and is acting to better the situation. It is our hopes that Peter can get a lab together to carry on his work without interruption.

LAKHOVSKY/RIFE

I am considering Lakhovsky as my next journalistic "victim", and although his personal history will, I'm sure, be great People Magazine stuff, actual proof that his MWO kills bacteria, fungi, and even virus is what's really important.

Our group has yet to acquire a MWO to test on specific micro-organisms using the microscope and/or dish cultures. We have also failed to acquire a Rife-like for testing THROUGH THE AIR "bug blows", although our group did accomplish this feat twice with ultraviolet germicidal bulbs modulated with slowly ascending audio frequencies. Our pond water microbes blew instantly around 800 Hz., but who knows what part the ultraviolet played (ultraviolet does not penetrate the skin tissue very deeply). I'm finding that time is the most difficult thing to acquire as experimenting can blow a whole weekend at 10 to 14 hours a day.

Anyone's THROUGH THE AIR microbe exploding experiments are greatly appreciated. Preferably your video will have a split screen showing your unit in action and your specimen exploding. The Dallas Rife Research Group is taking this tack.
Mark Simpson
author of The Rife Way III
Box 710088, Dallas, TX 75371

We hope the Lakhovsky info in this issue helps in your researches. Independent researchers who are documenting actual experiments with Lakhovsky/Rife equipment are encouraged to contact Mark as

he is compiling this data for others to use. And don't forget that we like to put that material in the Journal too.

UNUSUAL ENERGIES

I have started a project to pull together attributes of the scores of discoveries/findings in subtle/life/primary energy. Gallimore's works [Handbook of Unusual Energies, 3 vols. published by Health Research] are incomplete, very limited coverage and as a guide useless (no index, no citations, not even a contents list). I want to put together a guide to attributes on a comparative basis and covering not only the key people like Reichenbach but also the lesser workers. It's a massive job but the kind of effort I did at Stanford for seven years. Much is out of print or will need translation, so it will be a lengthy project.

Antony Sutton

Future Technology Intelligence Report
537 Jones Street, Suite 1606
San Francisco, CA 94102

Sounds like an excellent project to us, please keep us posted and we will also help supply any info from our files that is needed. The published result of this project will be a boon to borderland researchers everywhere. Jerry Gallimore's books are a great source of info if you like fishing. I know many people who have used them over the years as a stimulus to further ideas. A brief outline of Tony's ideas are contained in the April-May 1992 FTIR.

ETHERONS & THE BIG BANG

In connection with the recent dialogue in your Journal in which I put forth some of my ideas about a push theory of gravity based on the ether-concept, I had some further thoughts I would like to submit.

Such a gravity theory really hinges on the question of how magnetic forces arise in an ether, their nature, and why they are associated with cosmic bodies, galaxies, and atomic particles (magnetic fields.) The ether concept lends itself to a very simple explanatory model. I believe the simplest explanation is the likeliest correct one.

The most fundamental way to model

the origin of magnetic forces would be to imagine how they would arise cosmogenetically. As was pointed out in this Journal, a Big Bang model of cosmogenesis would probably be impossible to construct with an ether theory, but it does lend itself to a model at the elemental level, as follows. If it is assumed that cosmogenesis in an ether would have to be the result of a disturbance of a quiet, unenergized, zone of etherons, there would occur an initial setting-in-motion of the etherons, followed by resonant magnetic processes that proceed to organized magnetic systems. At first, as etherons begin encountering other etherons, most of the encounters would not be direct, but rather tangential brushes, imparting spin and magnetic polarities to the etherons as well as affecting their direction of motion. The total chaos of the initial flux would immediately give way to stabler etheric field-forces. Spinning singlets of etherons would resonate with other polarized singlets. Then, analogously-coupled pairs, then triplets, would resonate with analogous groups, and organization would appear. One key mechanism involved would be that of linear resonance, in which tiny groupings of etherons that by chance have a similar direction of motion (thus constituting mini particle fields) cross-over other similarly-aligned fields, the cross-over-effect aligning the spins of the particles within their own fields, accentuating their magnetism. In this way,

Cabals & Conspiracies!

STEAMSHOVEL PRESS

In issue five:

JFK Interviews:

Mark Lane; Kerry Thornley;

Jim Marrs; Dick Gregory

Robert Anton Wilson
on Discrimination Law

Alternative Aids Cures

An Analysis of Noam Chomsky

UFOs

\$5 from 5927 Kingsbury,
St. Louis, MO 63112

gradually-building, increasingly-organized, magnetic systems would arise.

To get a conceptual idea of how such etheric processes are mediated, one can imagine a body of water in which spinning metal balls are moving, and sending out waves within the water. It is easily seen how two balls rotating in the same direction will be attracted or repelled much differently than two balls rotating in opposite directions, due to the wave-effects.

A piece of "evidence" that to me, at least, favors the theory that analogous particle groupings resonate preferentially with each other, comes from my study of esoteric traditions having to do with Velikovsky's theory that Venus was a comet that brushed the earth (his book on the subject being *Worlds in Collision*, mine being *Twilight of the Gods*, available from IGOS, 255 N. El Cielo Rd, Suite 565, Palm Springs CA 92262, \$20). In the esoteric book *Oahspe*, it is related that such an event was precipitated by a god, or gods, allegorically named "APH", who somehow induced Venus to leave its previous orbital place in the solar system and become a comet (inferentially, they could have accomplished this by some manipulation of Venus' internal cosmic energies.) To me, it is highly interesting that the earth and Venus have the same size and mass. Therefore, if it is true that analogous magnetic systems preferentially resonate, and if it were desired to cause a great catastrophe on the earth by inducing another body to approach it, one would choose Venus, as it is the closest to the earth in size of any body in the solar system.

Referring back to the analogy of metal balls in water, it is easily seen how two balls having the same size would have their waves more in phase than balls of different sizes. I find these kinds of analogies helpful in conceptualizing the processes that would occur in an ether, and thought they would also be helpful for your readers.

Michael Baran
Brockton, MA

INFORMATION PLEASE

Can you give me the caveats for using

magnets in health? Do they deplete minerals from the body (such as when sleeping on a magnetic bed)? Are they dangerous to use near electricity? Will they damage electronic equipment (such as radionic) if they are in too close proximity? AND what is the basic theory of their effectiveness?

Roy Shabla
Downey, CA

I know many Borderlanders study this subject so perhaps we can get some input from the membership. I know that there are both beneficial and detrimental effects from using magnets, usage depends on many factors. Depending on strength they can damage electronic recording equipment or computers and any type of TV monitor. Some people use them to "clear" their radionic equipment as the magnetic field can break the subtle build-ups encountered. We're open to what others have to say on the subject.

RECEIVED

* **THE ASTROLOGICAL JOURNAL**
Published by the Astrological Association, London, England. This is one of the most intelligent, entertaining, and scientifically oriented magazines we've seen in a long while. Highly recommended for anyone interested in planetary energies and their manifestation. For more info contact: Angela Cornish, 396 Caledonian Road, London N1 1DN, England.

* **SPACE ENERGY RECEIVERS - Power from the Wheelwork of Nature**
Send \$6.50 plus \$1.00 P&H to Simplified Tech. Service, P. O. Box 2140 A, Champaign, IL 61825. Space energy receivers may be defined as a class of devices which apparently collect electrical energy from the surrounding space without applied force, by some process other than chemical or mechanical action. This book describes eight inventors and their devices, covering the years 1901 to 1945. Includes Tesla's research, Moray's receiver, Perrigo's transformer, patent lists, suppliers for experiments, and more. Very rare information!

* **NATURAL SCIENCE - The Newsletter of Biophysics.** Subscription - \$ from Michael Thau, Higher Dimensional Science, 405 Davis Court #2208, San Francisco, CA 94111 ph# (415) 296-1124. This newsletter explains how people are affected physically and emotionally by their immediate environment. These environmental factors include but are not limited to sound, light, color, electromagnetics, air, water and agricultural pollution, medicine chemicals, radiation, gravity, and certain behavioral patterns such as eating and drinking. The second edition includes articles entitled; Environmental Architecture, Musical E-Motion, and Recent Electromagnetic Findings. The third edition includes -- Sunspots and Climate, Magnets and Biology, and Book Reviews. Very interesting information.

* **KEEP YOURSELF ALIVE -- A 21st Century Guide to Perfect Health and Freedom From Stress** by Roger G. Lanphear, ISBN 0-9625800-2-3, \$9.95.

* **DOWSING -- Ancient origins and modern uses** by Rodney Davies. \$7.95 from Aquarian Press, 1991. A very lively and informative guide covering the fundamentals of dowsing. Davies explains how to make the three basic dowsing instruments: the wooden "Y" rod, metal "L" rods, and pendulums and discusses different methods and techniques employed by dowsers. Also includes a history of prominent dowsers from the 17th century to the present day, and much more. An excellent book that anyone interested in dowsing should have in their library.

* **BEITRAGE ZUR RUDOLF STEINER GESAMTAUSGABE** (Contribution to total knowledge of Rudolf Steiner's Subjects), #107, 1991. This is a German language magazine sent to us by Martin Wacy of Frontier Research (61 Theydon St., Walthamstow, London, England E17 8EN -- a European distributor of Borderland materials) who has a great interest in seeing science become enlightened. There is an extensive article on the "Strader machine". Strader was character in one of Steiner's mystery plays who developed a "free energy" device.

Jorge Resines has done a translation/review of this article which is available from BSRF for \$4 + appropriate tax & postage. Jorge was somewhat disappointed in the material, but does a very good analysis of what is available. Diagrams of the instrument are included. Thanks go out to both Martin and Jorge!

* **VECTOR FLEXOR Fold-a-Form**, from Tobi Toys, Rt. 1, Box 56, Elizabeth, AR 72532. This is a fun device comprised of 6" dowels connected with rubber joints. A large number of different geometric forms can be made, an icosahedron to a triangle, by bending and folding the Flexor. This is quite an educational tool to use for understanding the relationships between various geometric forms. Don't know the price, probably in the \$10 range, but would recommend this to anyone for hours of enjoyable geometric figuring.

CONTACTS

* **PARADOX - Newsletter of the Center for Treatment and Research of Experienced Anomalous Trauma**. \$20.00 published four times a year from Rima Laibow M. D., Director, TREAT, The Center for TREAT, PO Box 728, Ardsley, NY 10502-0728.

BORDERLAND NEWS

* SAFETY ALERT!!!!

Two recent incidents have uncovered a previously unknown phenomenon of the most serious gravity.

1. At Duquesne Electric a worker threw an electrical switch into a closed position, which produced a short-lived electrical spark.

2. An employee at UPS flipped open the colored lense of his welding helmet to better position the welding rod. He inadvertently struck the metal to be welded producing an electric arc.

BOTH MEN WERE WEARING CONTACT LENSES. Upon returning home from work, they removed the contact lenses, and **THE CORNEA OF THE EYE WAS REMOVED ALONG WITH THE LENS. RESULT: PERMANENT**

BLINDNESS!!!

The electric arc generates microwaves that instantly bond the cornea of the eye to the lens, by drying up the fluid between the eye and the lens. **THIS TRAUMA (INJURY) IS PAINLESS AND THE INDIVIDUAL NEVER KNOWS THAT AN INJURY HAS OCCURRED UNTIL THE CONTACT LENS IS REMOVED!!!**

As this phenomenon was unknown, no Federal, State, or local safety and health agency has regulations on this matter but they are pursuing the investigation and hopefully will take immediate action.

In the meantime, it is suggested that no contact lenses be worn by anyone who is potentially subject to an electrical sparking situation.

John Voss, Commonwealth Electric Co. Lincoln, Nebraska

(Credit: Dennis Ballard)

* **BOURGOIN: ROOM TEMPERATURE SUPER-CONDUCTOR** -- Filaments of Bismuth are manufactured from a homogenous melt of Bi and an insulator substance between the electrodes. The process forms true room-temperature superconductors! No need for liquid N, He, etc... This is very simple technology but industry hasn't acted on it yet. Here is an elegant revolutionary sleeper! One article & complete U. S. Patent -- 15pp available for \$2. For more info contact Rex Research, P. O. Box 19250, Jean, NV 89019. (Credit: R. A. Ford)

* **HUEYTOWN HUM** -- A mysterious hum emanating from the rolling hills around the small town of Hueytown, Alabama, has kept residents awake at night and set dogs to howling. The erratic "Hueytown Hum" resonates for as long as three days before going away for hours or even a week at a time. Savina Bradbury, a high school math teacher, said it sounds like "the hum of a fluorescent light tube about to go." Some residents believe it could be a natural phenomenon, while others blame it on huge ventilation fans installed in nearby coal mines. In an interview with a local radio station, a more pragmatic Hueytonian said his hometown hums "because it doesn't know the words." (Source: *Earthweek - A Diary of the Planet*, April 17, 1992.)

CONFERENCES

* **New Science and Technology Expo**, Sunday, July 26th, 1992, 9 AM - 9 PM San Mateo CA. Demonstrations and exhibits of MWOs, Light Boxes, Dowsing, Inert Gas devices, Air Ionizers, and more. Contact Mike Thau at (415) 341-2360.

* **International Tesla Symposium**, July 23-26, 1992, Colorado Springs, Colorado. Contact Steven Elswick, 17 East Las Vegas, Colorado Springs, CO 80905 (719) 475-0918

* **THE GREAT SAN FRANCISCO CRYSTAL FAIR**, Sept 26-27, 1992, at the Fort Mason Center, Laguna and Marina Blvd, San Francisco, admission is \$4. Presented by the Pacific Crystal Guild (P.O. Box 1371, Sausalito, CA 94966, phone (415) 383-7837) this event features gems and minerals, metaphysical healing tools, crystals, and jewelry. Over 50 exhibitors.

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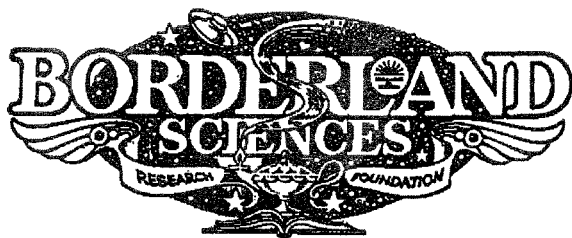
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The Lakhovsky Multiple Wave Oscillator

Earlier this century Georges Lakhovsky described researches indicating that living cells can be regenerated by applying energy fields of multiple wavelengths. This was done with cosmic radiations 'ringing' wires coiled around plants, and also with refined electrical fields 'ringing' specially designed antennas. Lakhovsky's original work into these subtle forces of nature included the effects of sunspot cycles on plant and animal health, the nature of cancer and how it appears in clusters over areas which have soils that reflect cosmic radiations, thereby causing interference patterns, and how diseased cells would turn to a state of health when specific natural or electrical fields were applied in a proper manner. Nikola Tesla provided research notes on his work with electro-therapy, and Lakhovsky was introduced to this through Professor D'Arsonval. Lakhovsky, a brilliant scientist, combined this knowledge with his original work and produced a device known as the Multiple Wave Oscillator.

The Multiple Wave Oscillator is an ongoing research project of B.S.R.F., started in 1963! Many designs of electrical wave generators have been built since the day's of Tesla and Lakhovsky. The records of Lakhovsky's researches leave many questions as to the exact nature of the electrical generator and antennas and it is a question of resounding debate on the current pages of *The Journal of Borderland Research*. Our current research file on Lakhovsky's work is available in both book and video format.

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